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"CHEMICUS LONDON."

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OCTOBER 7, 1911.

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Free the World over. Single Copies, 6d. each.
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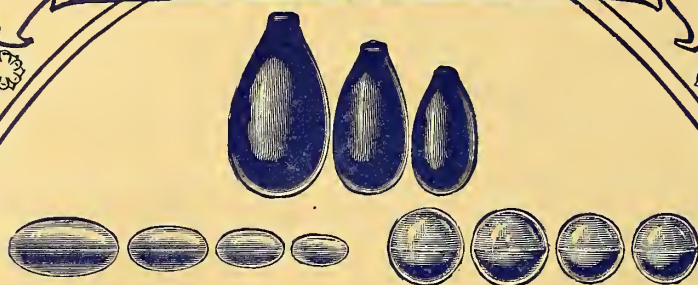
Distilled only from English-grown
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GIVE UNIVERSAL SATISFACTION.



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They are elegant in appearance and are delicately flavoured.

Packed in quite a new style of box containing 50 "Flexules" and a Circular with full directions for treatment, etc.

A very handsome Show Box for Counter or Window display is given with every order for 1 dozen boxes (see illustration) together with a patent washable Show Card.



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Price, 8/- per dozen.
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Dr.		£ s. d.
3 dozen boxes at 8/-	...	1 4 0
Carr. Paid	...	

Cr.		£ s. d.
3 dozen boxes at 18/-	...	2 14 0
1 " " Bonus	...	18 0

Show box, Show Card Gratis.

3 12 0

Profit on 3 dozen boxes £2 8s. 0d.

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Goods that show **140%** Profit.

ONE OF
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CUSTOMERS
SOLD
A GROSS
IN NINE
DAYS!



FAULTY DIGESTION
is due to the fact that the natural gastric juices of the organs are insufficient to do their work.

INDIGESTION TABLETS

Supply the Natural Juices and
DIGEST THE FOOD
for you; thus your Digestive Organs are Rested

SEE THIS TEST UPON
A HARD BOILED EGG
6d. CAN YOU DIGEST
A HARD BOILED EGG? **6d.**

**EAT
WHAT YOU FANCY**

But Take Two Indigestion Tablets
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And Yet Another

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25 in Slide Box

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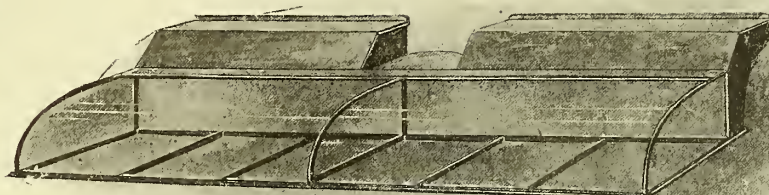
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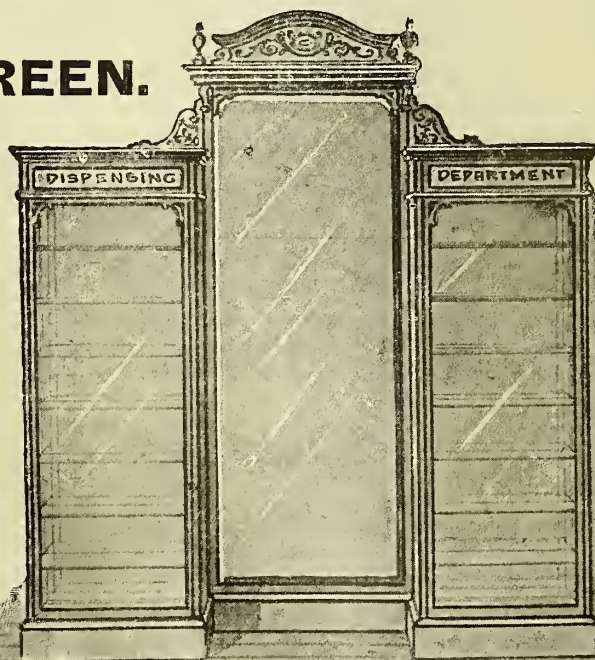
3 ft. long × 1 ft. 6 in. wide × 12 in. high to top of flat shelf	... £3 3 0
4 ft. Ditto	... 4 4 0
5 ft. Ditto	... 4 15 0
6 ft. Ditto	... 5 10 0
7 ft. Ditto	... 6 10 0
8 ft. Ditto	... 7 10 0
9 ft. Ditto	... 8 7 6
10 ft. Ditto	... 9 5 0

DISPENSING SCREEN.

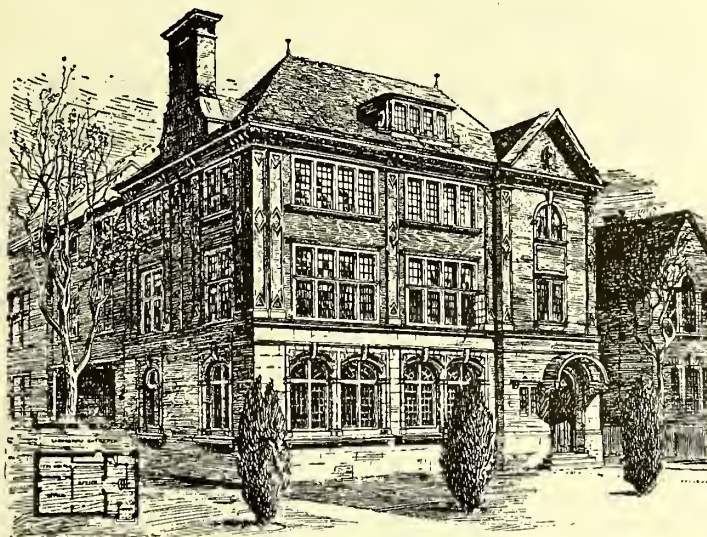
SPECIFICATION.

Constructed of Solid Mahogany with full size shaped and bevelled plate glass mirror centre surmounted by carved pediment. Full size showcases on each side, lined at back with silvered plate glass, opening with plate glass sashes. Interior fitted with adjustable polished plate glass shelves. Back of screen fitted with mahogany top compounding counter and dispensing shelves.

5 ft. long × 2 ft. 3 in. wide × 6 ft. 6 in. high over all	... £17 0 0
6 ft. long × 2 ft. 3 in. wide × 7 ft. high over all	... 18 10 0
7 ft. long × 2 ft. 3 in. wide × 7 ft. high over all	... 19 0 0



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Vibrona

THE IDEAL TONIC WINE.

VIBRONA is now in universal demand and every Chemist holding a wine licence can secure a rapid and profitable turnover by keeping **VIBRONA** well to the front.

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GREAT BRITAIN.

CASES containing 1 dozen, 36/- per case net, carriage *forward*.

Two CASES each containing 1-dozen, 36/- per case net, Carriage *paid*.

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TWELVE CASES (36 dozen)—5 per cent. discount and carriage *paid*.

VIBRONA is on the P.A.T.A. List.

The Minimum Retail Price is 3/9 per bottle.

It will be seen that the profit on a single case of 3-doz. **VIBRONA** is **£1 10s.**, and if advantage be taken of our maximum discount of 5 per cent. for twelve cases, the profit realised on the sale amounts to **over £21**. Some Chemists get through the latter quantity several times during the year, and there are few who cannot sell one case per month.

Terms for Export, with Special c.i.f. Rates to any port in the world, may be obtained on application to the Sole Proprietors, **FLETCHER, FLETCHER & CO., Ltd.**, Holloway, LONDON, N.

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SUITABLE FOR CHRISTMAS GIFTS.**

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200m	"SEASON'S GREETINGS" box containing 5 tablets Assorted Milled Soaps.	4/9	6d.
200n	"PET'S" Box of Soaps and Perfumes, containing an assortment of Bijou Tablets and Perfumes.	9/-	1/-
26c	"ALICIA" (Regd.), 3-tablet boxes, assorted.	5/-	6d.
20c	"CASSANDRA" (Regd.), 3-tablet boxes, assorted.	6/6	9d.
113b	"TEDDY BEARS" (Regd.), 12 in each box.	7/6	10½d.
113d	do. do. 6 "	4/-	6d.
114b	LITTLE "BIG MEN," 12 in each box.	7/6	10½d.
114d	do. do. 6 "	4/-	6d.
77x	"RIVERA" (Regd.) VIOLETS Toilet Soap, box containing 2 tablets of Soap and a 6d. bottle of "RIVERA" Perfume.	9/-	1/-
55x	"THRONE" (Regd.), box containing 2 tablets of Soap and a 6d. bottle of "THRONE" Perfume.	9/-	1/-
82d	SAYON "CORONATIA,"—A Souvenir of the Coronation Year, 1911—box containing 2 tablets of Soap and a 6d. bottle of "CORONATIA" Bouquet.	9/-	1/-
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£3 orders 10% Discount.

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SOAP SPECIALISTS,

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Allen & Hanbury, Ltd.
Baile Bros. & Stevenson, Ltd.
Bette & Co., Ltd.
British Drug Houses, Ltd., The
Davies, Sons & Co.
Dancou, J., & Co.
Duncan, Flockhart & Co.
Evans Sons Leacher & Webb Ltd.
Jeyes' Sanitary Compounds, Ltd
Lloyd, T. Howard, & Co.
Martindale, W.
Mason Bros. & Chapman
Parke, Davis & Co.
Tye, J., & Son
Wander, A., Ltd.
Warwick Bros.
Woolley, J., Sons & Co., Ltd.

CALENDARS

Ford, Shapland & Co.

CAPSULE PILLS

McKesson & Robbins

CARBOLIC ACID

Alliance Drug & Chem. Co.
Burt, Boulton & Hayward
Calvert, F. C., & Co.
Hoffman-La Roche, Ltd.

CARDAMOMS

Cardamom Cess Committee

CARTONS

Ford, Shapland & Co.
Harrison & Waide

CASH TILLS

National Cash Register Co., Ltd.

CASTOR OIL

Laidlaw, Wm., & Co., Ltd.
Sparks, White & Co. Ltd.
Varaldi, F.

CAUSTIC SODA

Brunner, Mond & Co., Ltd.

CEMENTS

Kay Bros., Ltd.

CHALK PRECIPITATED

Levermore, A., & Co., Ltd.
Mumford, G. S., & Sons
Nichols Chemical Co., Ltd.
Sturge, John & E., Ltd.

CHAMOIS LEATHER

North of England Chamois Co.

CHEMICALS

Anglo-Continental Chem. Wks.
Boehringer, C. F., & Soehne
Bramwell, E., & Son
British Drug Houses, Ltd., The
Brunner, Mond & Co., Ltd.
Burgeyne, Burbridges & Co.
Burroughs Wellcome & Co.
Corbyn Stacey & Co., Ltd.
Crown Chemical Works, Ltd.
Electrolytic Alkali Co., Ltd.
Evans Sons Leacher & Webb Ltd
Hoffmann-La Roche, Ltd.
Howards & Sons, Ltd.
Huskisson, H. O., & Co.
Johnson & Sons (Mfg. Chts.),
Ltd.
Macfarlan, J. F., & Co.
May & Baker, Ltd.
Merok, E.
Morson, T., & Son
Pointet & Girard
Smith, T. & H., Ltd.
Sturge, John & E., Ltd.
Tyrer, T., & Co., Ltd.
Washington Chemical Co., Ltd.
White, A., & Sons
Widenmann, Broicher & Co.

CHEST PROTECTORS

May, Roberts & Co., Ltd.
Solport Bros.
Wood, Vincent

CHLORATES, PERCHLO-

RATES

Societe d'Electro-Chimie

CHLORIDE OF LIME

Brunner, Mond & Co., Ltd.
Electrolytic Alkali Co., Ltd.
United Alkali Co., Ltd.

CHLORODYNE

Davenport, J. T., Ltd.
Freeman's Chlorodyne, Ltd.

CHLOROFORM

Alliance Drug & Chem. Co.
Burroughs Wellcome & Co.
Duncan, Flockhart & Co.
Macfarlan, J. F., & Co.
May & Baker, Ltd.
Morson, T., & Son
Smith, T. & H., Ltd.

CIGARS AND CIGARETTES

Hovenden, R., & Sons, Ltd.
Singleton & Cole, Ltd.

CITRIC ACID AND CITRATES

British Drug Houses, Ltd., The
Burgeyne, Burbridges & Co.
Howards & Sons, Ltd.
Morson, T., & Son
Sturge, John & E., Ltd.

CLINICAL THERMOMETERS

Burge, Warren & Ridgley, Ltd.
Maw, S., Son and Sons
Perken, Son & Co., Ltd.
Zeal, G. H.

CLOTH BALLS

O'Neil, Zetta & Co.
Senier, Alf., & Co.

COAL TAR SPECIALITIES

Sanitas Co., Ltd.
Wright, Layman & Umney, Ltd.

COCKROACH PASTE

Howarth & Fair

COCOA

Oadbury Bros., Ltd.

COD LIVER OIL

Albretson, A., & Co.
British Drug Houses, Ltd., The
Charity, W., & Sons
Devold Peder
Jervell & Co.
Sparks, White & Co. Ltd.
Wright, Layman & Umney, Ltd.

COLLAPSIBLE TUBES

Bette & Co.

COLOURS, BEVERAGE, &c.

Barnett & Foster
Boake Roberts & Co.
Stevenson & Howell, Ltd.

COLOURS, CHEMICAL

Williams Bros. & Co.

COMBS

Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newbery, Francis & Sons, Ltd.

CONDENSERS

Bennett, Sons & Shears, Ltd.

CONFECTIONERY COLOURS

Williams Bros. & Co.

CONTINENTAL PROPS.

Wilcox, Jozeau & Co.

COPPERSMITHS

Braithwaite, H., & Co., Ltd.
Bennett, Sons & Shears, Ltd.

CORKS

Ayrton, Saunders & Co., Ltd.
Mitchell, N. W., & Sons, Ltd.
Swales, Thomas
Viscose Development Co., Ltd.

CORN EXTERMINATOR

Gardner

CORN PLASTERS

Solport Bros.

COUNTER ADJUNCTS

Evans Sons Leacher & Webb Ltd

COUNTER BILLS

Ford, Shapland & Co.

COUNTER DISPLAY STANDS

London & Colonial Mfg. Co.

COUNTER SPECIALITIES

Allen & Hanbury, Ltd.
British Drug Houses, Ltd., The
Hewlett, C. J., & Sons
Lloyd, T. H., & Co., Ltd.
Lorimer Marshall
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Southall Bros. & Barclay, Ltd.

COURT PLASTER

Solport Bros.

CREAM OF TARTAR

British Drug Houses, Ltd., The

CREOSOTE

Baile Bros. & Stevenson, Ltd.
Burt, Boulton & Hayward, Ltd.
Morson, T., & Son

CREPE BANDAGES

Burge, Warren & Ridgley, Ltd.
Gimber, W., & Son
Leslies, Ltd.
Norwich Crêpe Co. (1856), Ltd.
Wood, Vincent

CRUTCHES

Bnah, H. W., & Co., Ltd.
Maw, S., Son and Sons

CYANIDES

May & Baker, Ltd.

DAIRY SPECIALITIES

Fullwood, R. J., & Bland
Oldfield, Pattinson & Co.

DENTAL INSTRUMENTS

Hatrick, Jas. L., & Co., Ltd.

DENTAL MECHANICS

Browning, A. J.
Cullwick H. E.
Fentiman, A. G.
Fentiman, A. J., & Co.
Garthwaite, H.
Halder, E. O.
Wardale & Co.

DEVELOPERS

Express Developing Co.

DEXTRINE

Fink, F., & Co.

DIABETIC FOODS

Ayrton, Saunders & Co., Ltd.
Brosson Jenne
Van Abbot, G., & Sons

DIGESTIVE PRODUCTS

Armour & Co., Ltd.
Beuger's Food, Ltd.
Fairchild Bros. & Foster
Parke, Davis & Co.
Squire & Sons
Widenmann, Broicher & Co.
Zimmermann, O., & Co.

DENTIFRICES

Bash & Co.
Becham, T.
Bell (John), Hills & Lucas, Ltd.
Blackie, Robert
Calvert, F. C., & Co.
Christy, T., & Co.
Cook, E., & Co., Ltd.
Eucryl, Ltd.
Jewsbury & Brown
John Strange Winter
Knox, Walker, J., & Co.
Lambert Pharmacal Co.
McKesson & Robbins (*Inset*)
Mason Bros. & Chapman
Maw, S., Son & Sons
Newbery, F., & Sons, Ltd.
Odol Chemical Works
Riedel, J. D., & Co.
Sangers'
Standard Tablet & Pill Co., Ltd.
Woolley, J., Sons & Co., Ltd.

DEVELOPERS (PHOTO)

Griffin, John J., & Sons, Ltd.
Johnson & Sons (Mfg. Chs.),
Ltd.
Jeyes' Sanitary Compounds,
Ltd.
Sanitas Co., Ltd.
Tomlinson & Hayward, Ltd.
Willows, Francis B. & T.
Wright, Layman & Umney, Ltd.

DOUCHES

Echbaum, F. A., Ltd.
Maw, S., Son and Sons
Reuter, R. J.

DRUGGISTS' SUNDRIES

Ayrton, Saunders & Co., Ltd.
Barclay & Sons, Ltd.
Berliner, Arthur
Burge, Warren & Ridgley, Ltd.
Bush, H. W., & Co., Ltd.
Christy, T., & Co.
Edwards, W., & Son
Evans Sons Leacher & Webb Ltd
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Newbery, F., & Sons, Ltd.
Pothe, H., & Co.
Quelch, H. C., & Co.
Reuter, R. J.
Sangers'
Schutze, F., & Co., Ltd.
Shirley Bros., Ltd.
Solport Bros.
Southall Bros. & Barclay, Ltd.
Swales, Thomas
Toogood, W., Ltd.
Wattenbach, O.
Woolley, J., Sons & Co., Ltd.

DRUGS, CRUDE

Baile Bros. & Stevenson, Ltd.
Brook, Parker & Co., Ltd.
Gathergood's Exor.
Goodall, Backhouse & Co.
Horner & Sons
Potter & Clarke, Ltd.
Ransom, W., & Son
Schmitt & Widenhahn
Sparks, White & Co., Ltd.

DYES

Crawshaw, E., & Co.
Judson, Daniel & Son
Whitaker & Co. (Hat)

DYEWARES

Clemons, Marshall & Carbert

EAU DE COLOGNE

Farina, J. M.
Farina, J. M. (No. 4)
Farina, Johann Maria
Flokus, Courtenay & Co.
McCracken, J., & R.
Schutze F. & Co. Ltd.
Van Oppen Ross & Co.

EAU DE COLOGNE SOAP

Van Oppen Ross & Co.

EFFERVESCENT PREPS.

Bishop, Alfred, Ltd.
Bristol-Myers Co.
Quest, Thos. & Co.
Lloyd T. Howard & Co.
Wright, Layman & Umney, Ltd.

ELASTIC HOSIERY

Ayrton, Saunders & Co., Ltd.
Burge, Warren & Ridgley, Ltd.
Haywood, J. H., Ltd.
Maw, S., Son & Sons
Surgical Hosiery Co. Ltd.
Wood, Vincent

EDUCATIONAL INSTITS

Bath & West of England College
Birmingham & Midland College
Borough Polytechnic
College of Preceptors
Glasgow School of Pharmacy
Liverpool School of Pharmacy
London College of Pharmacy
North of England School
Northern College of Pharmacy
South of England College
Westminster College

ELASTIC GUM INSTS.

Mason Bros. & Chapman

ELECTRIC POCKET LAMPS

Millard Brothers, Ltd.

EMERY AND CLOTH

Oakey, J., & Son, Ltd.

EMULSIFIERS

Bennett, Sons & Shears, Ltd.

EMULSIONS, C. L. O. &c.

Ayrton, Saunders & Co., Ltd.
Baiss Bros. & Stevenson, Ltd.

ENEMAS

Bailey, W. H., & Son
Burge, Warren & Ridgley, Ltd.
Daval Rubber Co.
Maw, S., Son & Sons
Newbery, F., & Sons, Ltd.
Warne, W., & Co., Ltd.

EPSOM SALTS

Corbyn, Stacey & Co., Ltd.
Howards & Sons, Ltd.

ESSENCES, CONCRETE

Lautier Fils
Tombarel Frères

ESSENCES, SOL. AND FRUIT

Alliance Drug & Chem. Co.
Barnett & Foster
Boake Roberts & Co., Ltd.
Bush, W. J., & Co., Ltd.
Hay, Wm., Ltd.
Lautier Fils
London Essence Co.
Newhall & Mason
Stevenson & Howell, Ltd.

ETHERS

Baiss Bros. & Stevenson, Ltd.
Duncan, Flockhart & Co.
Macfarlan, J. F., & Co.
May & Baker, Ltd.
Tyrer, T., & Co., Ltd.
Whitaker, A., & Sons

EUCALYPTUS OIL

British Drug Houses, Ltd., The

EXTRACT OF HERBS

Newhall & Mason
Potter & Clarke, Ltd.

EXTRACTS (MEDICINAL)

Allen, Stafford, & Sons, Ltd.
Evans Sons Lescher & Webb Ltd.
Gathergood's Exor.
Hewlett, C. J., & Son, Ltd.
Parke, Davis & Co.
Ransom, W., & Son

FACTORY SITES

North-Eastern Railway
Great Western Railway

FEEDING BOTTLES

Bush, Henry, W., & Co., Ltd.
Evans Sons Lescher & Webb Ltd.
Horlick's Malted Milk Co.
Hovenden, R., & Sons, Ltd.
Maw, S., Son & Sons
Reuter, R. J.
Sangers'
Schutze, F., & Co., Ltd.
Shirley Bros., Ltd.

FILTERS

Berkfeld Filter Co., Ltd.

FLESH GLOVES, STRAPS, &c.

Reuter, R. J.
Sangers'
Solport Bros.

FLYCATCHERS

Alabastine Co. (British), Ltd.
Brook, Parker & Co., Ltd.
Deansmore Manfg. Co.
Ford, Shapland & Co.
Kay Bros., Ltd.
Smith, J. H., & Co.
Tunbridge & Wright

FULLER'S EARTH

Mumford, G. S., & Sons

FOODS, INVALID, &c.

Allen & Hambroys, Ltd.
Bell (John), Hills & Lucas, Ltd.
Benger's Food, Ltd.
Bovril, Ltd.
Brand & Co., Ltd.
Cox, Arthur H., & Co., Ltd.
Fairchild Bros. & Foster
Horlick's Malted Milk Co.
"John Bull" Foods, Ltd.
Lecithin, Ltd.
"Lemco and Oxo"
Lofthouse & Saltmer
Natural Food Co., Ltd.
Neave, Josiah R., & Co.
Theinhardt's Food Co.
Turtle Cup (1911), Ltd.
Wander, A., Ltd.
Willows, Francis, B. & T.

FUMIGATORS

Sanitas Co., Ltd.

GLAUBER'S SALT

Bramwell, E., & Son
Howards & Sons, Ltd.

GLYCERINE

Meffert, Hermann & Co.
Price's Patent Candle Co., Ltd.

GLYCERINE PLANT

Forshaw, E., & Sons, Ltd.

GLYCEROPHOSPHATES

Merck, E.
Pointet & Girard
Reitmeyer & Co.

GOLD PAINT

Judson, D., & Son

GRAPHITE

Kahn & Co.

GRINDERS, DRUG, &c.

Allen, Stafford, & Sons, Ltd.
Goodall, Backhouse & Co.
Willows, Francis, B. & T.

GRIPE WATER

Woodward, W., Ltd.

GUMS

Fink, F., & Co.
Kidston, W. M., & Co.

HAIR DYES

Blackie, Robert
Harker, Stagg & Morgan, Ltd.
Knox Walker, J., & Co.
Osborne, Garret & Co.

HAIR PREPARATIONS

Anglo-Continental Trading Co.
Blackie, Robert
Chesbrough Manfg. Co.
Edwards' "Harlene" Co.
Egglossa Manfg. Co.
Harker, Stagg & Morgan, Ltd.
Harrison, G. W.
Herpicide Co.
John Strange Winter
Odol Chemical Works
Osborne, Garret & Co.
Robare's Aureoline
Vibert, F.
Warner Oliver, Ltd.

HAT CLEANERS

Christy, Thos. & Co.
Senior, Alf., & Co.

HAT DYES

Whitaker & Co.

HAY FEVER REMEDY

Lu-Ku Co.

HEATING APPARATUS

Clark's Syphon Stove Co., Ltd.
Richmond Gas Stove & Meter

HERBS

Brook, Parker & Co., Ltd.
Pannett & Noden
Potter & Clarke, Ltd.
Ransom, W., & Son

HOMŒOPATHIC MEDICINES

Ashton & Parsons, Ltd.
Keene & Ashwell, Ltd.

HOSPITAL FURNITURE

Hatrick, Jas. L., & Co., Ltd.

HOTELS

Edmond Hotel
Kingsley Hotel
Thackeray Hotel

HOT-WATER BOTTLES, &c.

Berliner, Arthur
Burge, Warren & Ridgley, Ltd.
Galen Manfg. Co., Ltd.
Maw, S., Son & Sons
May, Roberts & Co., Ltd.
Scutthall Bros. & Barclay
Tompkins, James, Ltd.
Wood, Vincent

HYPOPHOSPHITES

May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

HYDROGEN PEROXIDE

May & Baker, Ltd.
Sanitas Co., Ltd.
Tyrer, T., & Co., Ltd.

ICHTHYOL

Ichthyol Gesellschaft

INHALERS

Burroughs Wellcome & Co.

Maw, S., Son & Sons

INK POWDERS

Williams Bros & Co.

INSECTICIDES

Christy, Thos. & Co.
Tomlinson & Hayward, Ltd.

INSECT POWDER

Keating, Thomas

INSTEP SUPPORTS

Scholl, C. Manig. Co.

IODINE RESUBLIMED

Huskisson, H. O., & Co.

IRISH MOSS

Cumming, J. W.
Salle, H., & Co.

ITROSYL

Fletcher, Fletcher & Co.

JARS AND POTS

Johnsen & Jorgensen, Ltd.

Reuter, R. J.
Stipendum Stopper Co.

JELLOIDS

Jellid Co.

JUJUBES

Guest, Thos., & Co.
Potter & Clarke, Ltd.

JUNKET POWDER

Armour & Co., Ltd.

LANOLINE

Burroughs Wellcome & Co.

LARD

Ewen, J., & Sons

LAVERDER OIL

Jackson, John, & Co.
Zimmermann, C., & Co.

LAVERDER WATER

Maddocks & Co.

LEATHER DYES

Williams, Bros. & Co.

LECITHIN

Chemical Works "Victoria"
Salle, H., & Co.

LIME JUICE AND CORDIAL

Evans Sons Lescher & Webb Ltd.
Goodall, Backhouse & Co.
Idris & Co., Ltd.

LINSEED, CRUSHED, &c.

Mumford, G. S., & Sons
Taylor, J., & Sons, Ltd.

LINTS

Liverpool Lint Co.
Maw, S., Son & Sons
Robinson & Sons, Ltd.
Taylor, W. G.

LIQUORICE JUICE

Apollo
British Drug Houses, Ltd., The
Evans Sons Lescher & Webb Ltd.
Horner & Sons
Jackson, E. E.
Mumford, G. S., & Sons
Solazzi
Whittaker, Arthur

LIQUORS, CONC., &c.

Fletcher, Fletcher & Co.
Hewlett, C. J., & Son
Robinson, E., & Co.
Wylea, Ltd.

LITHIA SALTS

British Drug Houses, Ltd., The
May & Baker, Ltd.

LOOFABS

Internl. Sponge Importers, Ltd.
Solport Bros.

LOZENGES

Ayrton, Saunders & Co., Ltd.
Cox, A. H., & Co., Ltd.
Denoual, J., & Co.
Guest, Thos. & Co.
Jackson, E. E.
Potter & Clarke, Ltd.
Raines & Co.
Standard Tablet & Pill Co., Ltd.
Warrick Bros.

MAGNESIA AND ITS SALTS

Henry, T. & W.
Howards & Sons, Ltd.
May & Baker, Ltd.
Washington Chemical Co., Ltd.

MALT EXTRACT & PREPS.

Davies, Sons & Co.

MANICURE PREPARATIONS

Saunders, J. Touzeau, Ltd.

MARKING INK

Hickisson, A. (Bond's)
Williams Bros. & Co.

MACHINERY, PHARMACAL

Allen & Hambroys, Ltd.
Bennett, E., & Son, Ltd.
Bennett, Sons & Shears, Ltd.
Boothroyd, H. T., Ltd.
Braithwaite, H., & Co., Ltd.
Comet Chemical Co., Ltd.
Forshaw, E., & Son, Ltd.
Gardner, Wm., & Sons, Ltd.
Griffin, J. J., & Sons, Ltd.
Pindar, J. W., & Co.
Stokes, F. J., Machine Co.
Wilkinson, S. W., & Co.

MEAT EXTRACTS

Armour & Co., Ltd.
Bovril, Ltd.

"Brand & Co., Ltd."
"Lemco and Oxo."

Tooth's Extract of Meat Co.

MECHANICAL SHOW**FIGURES**

Bush, Henry W., & Co., Ltd.

MEDICINE TUMBLERS

Bush, Henry W., & Co., Ltd.

MERCURIALS

Alliance Drug & Chem. Co.
Howards & Sons, Ltd.

May & Baker, Ltd.
Tyrer, T., & Co., Ltd.

METAL GOODS

Betts & Co., Ltd.

METHYLATED SPIRIT

Burrough, J., Ltd.
Preston's Liverpool Distillery.

Randall & Son, Ltd.

MICROSCOPES

Raphael's, Ltd.

MINERAL WATERS, SALTS

Apollinaris Co., Ltd.
British Drug Houses, Ltd., The.
Hughes, E. Griffiths.
Ingram & Royle, Ltd.
Vichy (State Springs)
Vittel

MIXERS AND S'FTERS

Comet Chemicals, Ltd.
Gardner, Wm. & Sons (Glos-
cester), Ltd.

MUSTARD PLASTERS

Rueff, Julius

NURSES REQUISITES

Hatrick, Jas. L., & Co., Ltd.

OILS, MINERAL, FATTY, &c

Allen, Stafford, & Sons, Ltd.
Price's Patent Candle Co.
Schliemann's Oil & Ceresine Co.
Stern Sonneborn Oil Co., Ltd.

OILS, ESSENTIAL

Allen, Stafford, & Sons, Ltd.
Alliance Drug & Chemical Co.
Boake, A., Roberts & Co., Ltd.
Bush, W. J., & Co., Ltd.
Dodge & Olcott Co.
Evans Sons Lescher & Webb, Ltd.
Jackson, John, & Co.
Lautier Fils
London Essence Co.
Poppelreuter, W.
Ransom, W., & Son.
Schimmel & Co.
Stevenson & Howell, Ltd.
Tombarel Frères
Varaldi, F.
Wright, Layman & Umney, Ltd.
Zimmermann, C., & Co.

OINTMENTS

Blackie, Robert
Burgess, E.
Calvert, F. C., & Co.
Cox, Arthur H., & Co.
Oldfield, Pattinson & Co.
Peat Products (Sphagnol), Ltd.
Smith, Maurice
Zimmermann, Chas. & Co.

OLIVE OIL

Goodall, Backhouse & Co.
Sparks, White & Co. Ltd.
Varaldi, F.

OPTICAL GOODS

Baird, John
Botwright & Grey
Darton, F., & Co.
Maw, S., Son & Sons
Nitsche & Gunther Opt. Co., Ltd.
Raphael's, Ltd.

OPTICAL TUITION

Anglo American Optical Co.
British Optical Institute, Ltd.
Spectacle Makers' Company

ORANGE WINE

Hobson, Joseph & Son
Melrose-Drover Co., Ltd.
Mullar, A., & Co., Ltd.

OTTO OF ROSE

Crown Chem. Wks. (Synth.)

PALATINOLIDS

Oppenheimer, Son & Co., Ltd.

PHOTO. POSTCARDS

Rajar Ltd.

PACKED GOODS

Allen & Hanburys, Ltd.
Ayrton, Saunders & Co., Ltd.
Bais Bros. & Stevenson, Ltd.
Blackie, Robert
Boulton, James & Co. (1909)
Brook, Parker & Co., Ltd.
Cox, Arthur H., & Co., Ltd.
Christy, Thos., & Co.
Davies, Sons & Co.
Goodall, Backhouse & Co.
Harker, C. R., Staggs & Morgan
Knox Walker, J., & Co.
Lloyd T., Howard, & Co.
Lorimer Marshall
May, Roberts & Co., Ltd.
Newball & Mason
Oldfield, Pattinson & Co.
Potter & Clarke, Ltd.
Sangers
Shirley Bros., Ltd.
Standard Tablet & Pill Co., Ltd.

PASTILLES

Allen & Hanburys, Ltd.
Asche, O. F., & Co.
Burroughs Wellcome & Co.
Denoual, J., & Co.
Evans Sons Lescher & Webb, Ltd.
Guest, Thos., & Co.
Warrick Bros.

PATENT AGENT

Barker, R. W.

PEPPERMINT OIL

Jakson, John & Co.

PERFUME MATERIALS

Busb, W. J., & Co., Ltd.
Horn & Sons
Lautier Fils
Naef, M., & Co., Succrs.
Schimmel & Co.
Varaldi, F.
Wright, Layman & Umney, Ltd.
Zimmermann, O. & Co.

PERFUMES

Allen & Hanburys, Ltd.
Bais Bros. & Stevenson, Ltd.
Barclay & Sons, Ltd.
Bronnley, H., & Co., Ltd.
Bush, W. J., & Co., Ltd.
Christy, T., & Co.
Claber, S., & Co., Ltd.
Erasmo Co., Ltd.
Evans Sons Lescher & Webb, Ltd.
Haliford Co.
Hewlett, C. J., & Son
Hovenden, R., & Sons, Ltd.
John Strange Winter
Lescro Perfumery Co.
McCraoken, J. & R.
Newbery, F., & Sons, Ltd.
Piver, L. T.
Queleb, H. C., & Co.
Rivers, Hill & Co., Ltd.
Southall Bros. & Barclay Ltd.
Van Oppen, Ross & Co.
Vinolia Co.
Warrick Bros.
West, T., & Son
Wolf, F., & Sohn

PESSARIES (SOLUBLE)

Burge, Warren & Ridgley, Ltd.
Rendell, W. J.

PETROLEUM JELLY

Cheesebrough Mfg. Co.
Schliemann's Oil & Ceresine Co.
Stern, Sonneborn Oil Co., Ltd.

PHOTO. CHEMICALS

Boehringer, O. F., & Soehne
Griffin, John J., & Sons, Ltd.
Johnson & Sons (Mfg. Chts.), Ltd.
Reitmeyer & Co.

PHOTO. ENLARGERS,

PRINTERS, &c.

Express Developing Co.

PHOTO. GOODS

Barclay & Sons, Ltd.
Burroughs Wellcome & Co.
Evans Sons Lescher & Webb, Ltd.
Griffin, John J., & Sons, Ltd.
Ilford, Ltd.
Kent, G. B., & Sons, Ltd.
Lennon, Ltd.
May, Roberts, & Co., Ltd.
Newbery, F., & Sons, Ltd.
Oppenheimer, Son & Co., Ltd.
Rajar Ltd.
Silverdale Photo Works.

PHOTO. RUBBER GOODS, &c.

Altrincham Rubber Co.

PLASTERS

Alcock Mfg. Co.
Berliner, Arthur
Dalmas, A. de St., & Co.
Leslies, Ltd.

PLEATED PAPER

Darter, Wilkinson & Co.
Smith Bros. & Co.

PILL MAKERS

Allen & Hanburys, Ltd.
Asche, C. F., & Co.
British Drug Houses, Ltd., The
Cox, A. H., & Co., Ltd.
Davies, Sons & Co.
Howards & Sons, Ltd.
Lloyd, T. Howard, & Co.
Parke, Davis & Co.
Standard Tablet & Pill Co., Ltd.
Wand Manfg. Co.
Wyleys, Ltd.

POLISHES (VARIOUS)

Bradley & Bourdas
Judson, D., & Son
Oakley, J., & Sons, Ltd.

POSTAL BOXES

Robinson & Sons, Ltd.

POSTERS

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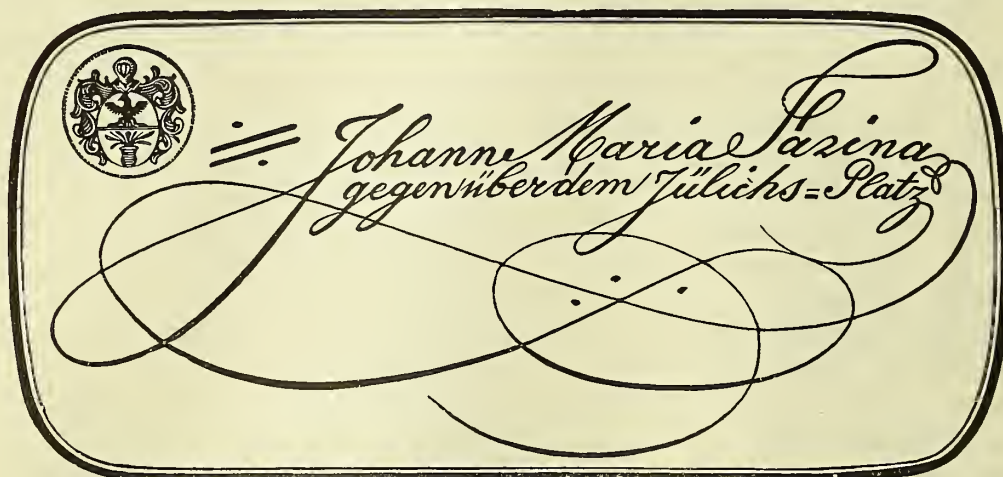
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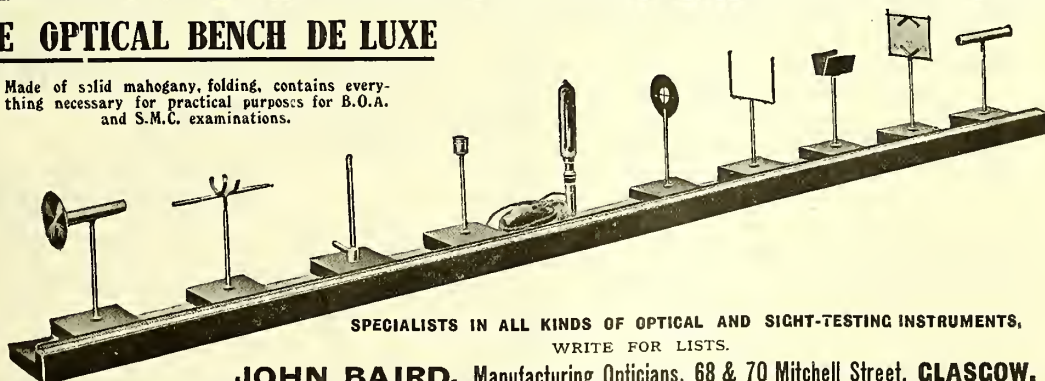
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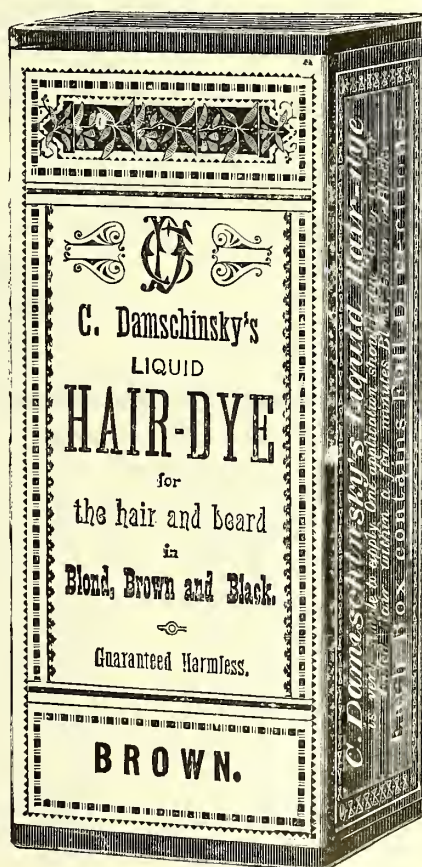
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OSBORNE, GARRETT & CO., LONDON, W.

By Appointment to
H.M. King George V.



**Brussels Exhibition
— 1910 —**

“GOLD MEDAL”

Highest Award for Eau de Cologne.



**Johann Maria Farina's
Julichs Platz No. 4**

GENUINE

EAU DE COLOGNE

is known throughout the world by the label on the bottle as shown herewith. Attention is drawn to the No. 4, which is the number of Johann Maria Farina's Factory Place, viz., Julichs Platz No. 4, in the city of Cologne on the Rhine.

Wholesale Agents:
FICKUS,

COURTENAY & CO., Ltd.
36 Sackville St., Piccadilly,
LONDON, W.

COURVOISIER'S

Havanita

THE SELLING LINE for 1911

Our advertising sells the first bottle for you; The sterling merit of the perfume brings back your buyer for further supplies.

Havanita Perfume,

17/8, 33/-, 59/6, 112/6 per doz.
2/3, 4/3, 7/6, 14/6 per bot. retail

Havanita Soap,

24/- per doz. boxes; 2/9 per box retail

Viotto 14/10, 28/7, 55/-, 103/6, 198/- per doz.

Perfume 1/8, 3/2, 6/-, 11/9, 22/6 per bot. retail

Viotto Soap ... 21/- per doz. boxes; 2/6 per box retail

„ Face Powder 11/6 „ „ 1/6 „ „

Courvoisier's Mimosa 7/9, 15/6, 31/- per doz.
(for the Hands) 1/-, 2/-, 4/- per bot. retail

Courvoisier's C.C. Perfumes,
30/- per dozen; 3/9 per vial retail

ALL ENTERED ON THE P.A.T.A.

H. BRONNLEY & CO., Ltd.
Acton Vale, London, W.



In Charming Cut Crystal Bottles, 5 sizes, from 2/6



A Perfume
of Refined and
Subtle Fragrance, of
Distinctive Character, remarkable
for its Novelty and Delicacy.

DIVINIA

*The Favourite Perfume
of the Fashionable World.*

Gold Medal,
Paris, 1900.

Grand Prix,
St. Louis, 1904.

Sole Makers—

F. WOLFF & SOHN,

LONDON, PARIS, KARLSRUHE
Wholesale—82 Hatton Garden, E.C.

Sold by Chemists.

The number of dentifrices is myriad, their names are legion,

But—

in principle and in efficiency there is but one,

CALOX

THE OXYGEN TOOTH POWDER.

Its principle is the evolution of oxygen.

Its efficiency as a cleanser of the teeth is due to the oxygen which it generates when used.

Not only antiseptic, but deodorant, two desirable properties of a tooth powder. Its oxidizing and deodorizing power was obvious in our experiments.—THE LANCET, London, Eng.

Possesses not only strong antiseptic, but deodorizing and oxidizing properties, as the result of which the teeth, after a few days' use of CALOX, acquire a pearly whiteness.—THE CHEMIST AND DRUGGIST, London.

CALOX is entirely different from other dentifrices. Its introduction marks a decided advance in the scientific development of a dentifrice, a fact which the dental profession the world over has been quick to recognise. Chemists should interest themselves in Calox because only a chemist can explain the peculiar virtues and value of an oxygen-producing dentifrice.

Price to the trade, 9/6 per dozen on the P.A.T.A. plan.

McKESSON & ROBBINS, New York, U.S.A., Manufacturers.

BRITISH DEPOT—G. B. KENT & SONS, Ltd., 75 Farringdon Road, London, E.C.

THE "HALIFLOR" Co.

SPECIALITIES.
ALCOHOL -- Free Floral
 Essences.
NATURAL FLORAL
 ESSENCES for Perfumes.
FLORAL ESSENCES soluble
 in Water.
FLORAL ESSENCES for
 Pomades.
FLORAL ESSENCES for
 Brilliantines.
FLORAL ESSENCES for
 Hair washes.
 AGENTS WANTED WHERE NOT REPRESENTED.

PARIS & DOBERAN.
ESSENCES for making BAY
 RUM, EAU DE QUININE.
HALIFLOR.
CROWN PRINCESS VIOLET
 Now so largely Advertised.
HALIFLOR.
FRECKLE-CREAM
 For the removal of Freckles, and
 as a Food for the Skin.
HALIFLOR
FACE POWDER & FACE CREAM.
 London House:
 HERTZ & Co., 9 Mincing Lane, E.C.

SPECIALITIES.
CHRISTMAS GOODS, FANCY
CASES.
PERFUMES FOR HOME AND
EXPORT.
QUADRUPLE EXTRACTS IN
BULK.
HALIFLOR CACHOUS IN
GREAT VARIETY.
SILVER and SILVER GILT
CASKETS FOR THE
CROWN PRINCESS VIOLET.
 SAMPLES AND PRICE LIST ON APPLICATION.

IMPORTANT NOTICE.



Spurious "SILVERDRAWN" Tooth Brushes are being stamped "SILVERDRAWN" and offered to the Trade, which are NOT made by us, and to prevent loss and disappointment Chemists desiring our make of Brushes will please in future order through our recognised agents, our travellers, or direct from the works, Axminster, Devon.

BIDWELL, BIDWELL & CO.

SUPPORT HOME INDUSTRIES.

Estd. 1777.



Incd. 1900.

BUY

KENT'S
BRUSHES.

Summer Issue, 1911, pp. 42, 43.
 Diary, 1911, pp. 76, 77.

CONCRETE ORRIS

The Whitest.

The Strongest.

The Finest.

GREY Orris Concrete colours Extracts, indicates impurities or bad manufacture; therefore avoid it.

PALE NATURAL ESSENCE JASMIN

DARK JASMIN colours Extracts. **CHEMICALLY BLEACHED JASMIN** alters true Flower Perfume.

Our **PALE NATURAL JASMIN** gives the real Flower Odour and Light Extracts.

Our production of **ORRIS CONCRETE** and **NATURAL JASMIN** has trebled during the last two years.

TOMBAREL FRERES, Grasse

FESTIVAL OF EMPIRE, IMPERIAL EXHIBITION, 1911.

Awarded

GRAND PRIX

FOR

Candles, Night Lights, Toilet Soaps, Clarke's
Pyramid and Fairy Lights, Lubricating Oils.

91 HONOURS AND AWARDS.

PRICE'S PATENT CANDLE COMPANY LIMITED.

LONDON. LIVERPOOL. CAPE TOWN. JOHANNESBURG. SHANGHAI.

49 Varieties of Toilet Soaps Reserved Exclusively for Chemists.

SHALL I PUSH EUCRYL TOOTH POWDER

or run one of my own make? Is this the question that is troubling you? If so let us study the financial aspect of the case. Could you produce for 3d. per tin a dentifrice equal in quality, appearance, and style to Eucryl? Could you include for this sum free samples, showcards, and advertising matter? Our experience tells us that, unless working in large quantities as are prohibitive to a retail business, you could not

It is cheaper to buy Eucryl, the dentifrice that pays you 100 per cent. profit, and which your customers will come for again and again.

EUCRYL Limited, SCULCOATES, HULL.

ESSENTIAL OILS. SOUTH AMERICAN BALSAMS.

THE **D & O** BRAND
STANDARD OF QUALITY.

Samples and quotations will be promptly furnished on application.

DODGE & OLCOTT CO., 20 MARK LANE, E.C.

Telephone—
2468 City.

TIDMAN'S SEA SALT.

ON P.A.T.A. LIST. GOOD PROFITS. SMALL STOCK. QUICK SALES.

Orders of Twenty Shillings value and upwards Carriage paid—Cases Free.
Advertised Price. Minimum Retail Price. Minimum Wholesale Price

1d. Packets.	12 in box	9½d.	per box.	7/7	per grs.
2d. "	"	1/6	"	14/9	"
1d. linen Bags.	"	9½d.	"	7/7	"
2d. "	6 in box	9½d.	"	14/9	"
4d. Boxes, about 1½ lbs.	3d.	"	"	2/6	per doz.
8d. "	"	3	"	6d.	"
1/2 "	"	7	"	11½d.	"
2- "	"	14	"	1/9	"
				9/8	"
				17/6	"

SINGLE BAGS of following 3 sizes sent CARRIAGE PAID to any place in the United Kingdom, so that there is no stock to hold.

3/- Bags (or boxes)	28 lb.	3/- each	2/6 each.
5/6 Bags	Net.	½ cwt.	5/6 "
10/- Bags	Net.	1 cwt.	10/- "
			4/6 "
			8/- "

Accounts Monthly due 10th of following month. Terms for Seidlitz Powders, Pinnacle Soap Stands, Toilet Soaps, &c., sent on application.

TIDMAN & SON, LTD., WAPPING, LONDON, E.

SAL HEPATICA.

PUT UP FOR EXPORT.

Small	size,	3 oz.	bottle, in case.
Medium	"	7	" " "
Large	"	16	" " "

OBTAINABLE IN LONDON FROM

Thos. Christy & Co., 4-12 Old Swan Lane, Upper Thames Street, E.C.

The American Drug Stores, 24 Orange Street, Haymarket, London, W.C.

Burgoyne, Burbidges & Co., 26 Coleman Street, E.C.

F. Newbery & Sons, Ltd., 27 Charterhouse Square.

Roberts & Co., 76 New Bond Street, W.



URILLAC

The New Remedy for Gout, Rheumatism,
Lumbago, Sciatica and Neuralgia now
being extensively advertised. ∴

1/1½ & 2/9. **Per dozen 9/6 & 19/-.**

STOCKED BY ALL WHOLESALERS.

URILLAC SYNDICATE,

38 Chandos Street, LONDON, W.C.

VISCOSE Bottle Caps

are so positively SIMPLE that we cannot urge this point too much. But Viscose Caps are also the most efficient, most reliable, most elegant form of capping for all bottles obtainable. Try it!

VISCOSE DEVELOPMENT CO., LTD.,
11 Queen Victoria
St., London, E.C.



Put the wet cap
loosely over the
neck of bottle
and leave. As it
dries it shrinks
tight as a drum
and air-tight and
spirit-proof.

THIS

is all
you do
!



REDUCED PRICES.

PLEATED BOTTLE CAPS



Nos. 0, 1, 2, 3, 3B, 10, 20, 30 for Phials ...	...	...	4d. per gross.
„ 4, 4B, 40 for 3 to 6 oz. Bottles ...	...	...	4½d. „
„ 5, 5B, 5½, 50 for 8 to 10 oz. bottles ...	...	...	5d. „
„ 6, 6B, 60 for Pints ...	...	...	5½d. „
„ 39 for Winchester Quarts ...	...	...	7d. „
„ 8, Long, for Wines ...	...	...	9d. „

Elastic Bands, small 3d.; large 4d. per gross.

Also Manufacturers of DISH & DESSERT PAPERS, &c.

WHOLESALE and EXPORT only of
DARTER, WILKINSON & CO. 23, 24, 25 SANDLAND STREET,
LONDON, W.C.

The great HAIR TONIC

IT PAYS TO SELL

1/- size, 8/- per doz.
2/6 „ 20/- „
NO CUTTING

*Of Wholesale Houses or direct
from*

EGGLOSSA MFG. CO.
Gloucester Road,
BRISTOL

EGGLOSSA



If you
want a new hat
**DON'T BUY
JUST DYE.**

Your
old one
for
6d.

With
"LUTON"
STRAW HAT DYE

In bottles, 6d. each, in separate neat cartons, with suitable brush.
These Dyes are a distinct invention, dying the straw without
an objectionable varnished appearance, and producing the
effect of new goods.

Write for terms, patterns, also leaflet of testimonials:

WHITAKER & CO. COLOUR WORKS,
KENDAL, ENG.

London Depot: 8 MILK STREET, CHEAPSIDE, E.C.

SPECIALISTS IN VARNISHES, STAINS, DYES, &c. EST. 1878.

Sale to Chemists only.

'DUCHESS' REGD. 2d. Toilets.

Are you satisfied with your
present **2d.** trade? Are
you selling the right kind to
bring repeats? You can be
sure of satisfaction if you sell
the

'DUCHESS' Toilet Soaps.

All exquisitely perfumed.

18 Varieties.

Handsome Counter Case
free for display.

On P.A.T.A. No Cutting.

Own Name Soaps.

A splendid variety of box
labels and wrappers. Get
our samples and prices before
ordering elsewhere. It will
pay you.

FOR PRICES AND SAMPLE WRITE

THE ERASMIC CO. ^{Ltd.}
WARRINGTON.



"Velvix"

**Complexion
Leaflets.**

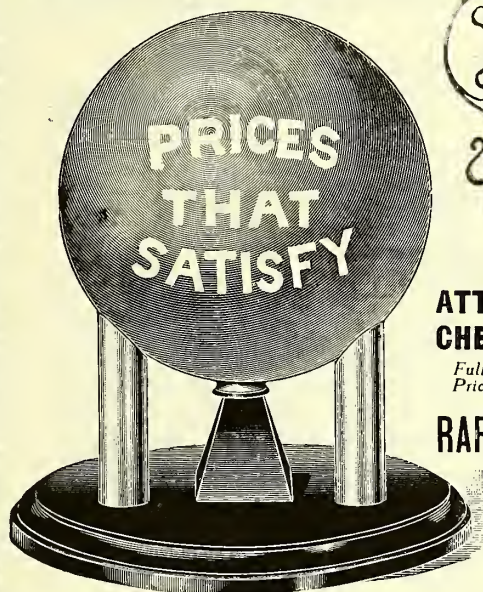
PER GROSS, 18/6 NET,
with Samples & Showcard.

∴ ∴ NO LOOSE POWDER. ∴ ∴
SPREAD ON GENUINE JAP PAPER.
EXCEPTIONALLY ATTRACTIVE.

WRITE FOR SAMPLE.

Sangers, 258 EUSTON ROAD,
N.W.

Flashing Signs and Globes.



Flashing Globes (various colours) for Window Display.
Wording to suit customer.



No. 12293.

**ATTRACTIVE DEVICES for
CHEMISTS & OPTICIANS.**

*Full Particulars and
Prices on application
to*

RAPHAEL'S, Ltd.

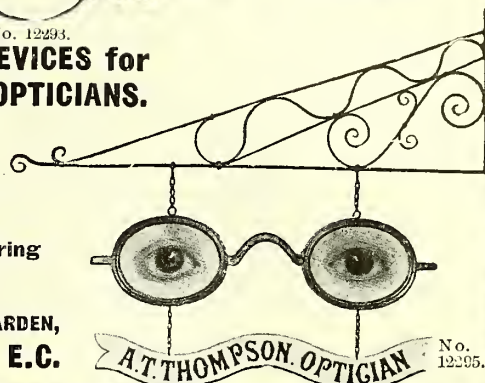
Manufacturing
Opticians,

**HATTON GARDEN,
LONDON, E.C.**

These Flashing Signs
are operated by an
ingenious electrical
device giving inter-
mittent flashes at in-
tervals of about 20
seconds.
Nothing so readily
attracts attention.

Wording can be
arranged and Special
Designs made up to
suit purchaser's
requirements.

**A Good Sign
MAKES
MONEY.**



No.
12295.

LYNCH'S RUBBER HOT-WATER BOTTLES. BEST BRITISH MANUFACTURE. QUALITY AND WEIGHT GUARANTEED.

6 × 8	...	... each	3/1	8 × 14	...	... each	5/2
6 × 10	...	... each	3/5	10 × 12	...	... each	5/8
6 × 12	...	... each	3/10	10 × 14	...	... each	6/4
8 × 10	...	... each	4/5	10 × 16	...	... each	6/10
8 × 12	...	... each	4/9	12 × 14	...	... each	7/2
12 × 16	...	... each	7/11				

TWO YEARS GUARANTEE.

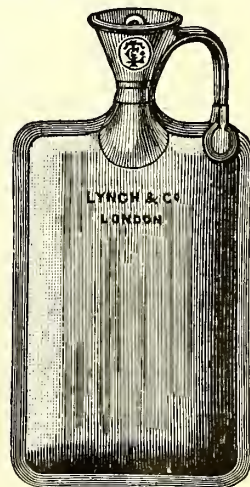
SUBJECT TO 5% DISCOUNT, AND £2 WORTH CARRIAGE PAID.

IN 14 lb. LOTS 5/5 lb. NETT.

CUSTOMER'S OWN NAME FREE ON 3 DOZEN.

PRICE LIST AND TERMS ON APPLICATION.

MAY ROBERTS & CO., LTD., LONDON & DUBLIN.



Suttley & Silverlock, Ltd.

Telephone No
3474 HOP.

LONDON, S.E.

Telegrams
"SILVERLOCK, LONDON".

CHEMISTS' & DRUGGISTS' LABEL & GENERAL PRINTERS.

THE LARGEST SELECTION OF STOCK FANCY
LABELS FOR WINTER PREPARATIONS.

*Wholesale Druggists' Price Lists and Catalogues
of every description.*

For Chemists and Drug Stores.

You will now be preparing your Winter Specialities and wondering how to advertise the same. You cannot do better than write to us for samples of our advertising matter for Coughs, Colds, Lung Complaints, Rheumatism, &c. We shall have them ready by September 30th, 1911.

SEND 6D. FOR SAMPLES.

Samples sent to Colonies on receipt of 10/6, which amount we credit for a £5 order.

HARRISON & WAIDE

CHEMISTS' PRINTERS

KIRKSTALL ROAD, LEEDS, England.

FORD SHAPLAND & CO.

Chemists' & General Printers, Etc.,

6 Great Turnstile, High Holborn, London, W.C.

(TELEPHONE 65 CITY)

Write or phone for List and Samples of our

ALMANACKS AND CALENDARS.

1912

New and choice designs have been produced and they will, in all respects, maintain their popular features.

FORD SHAPLAND & CO.

6 Great Turnstile, LONDON, W.C.

OUR NEW

Illustrated Catalogue

IS NOW ISSUED.

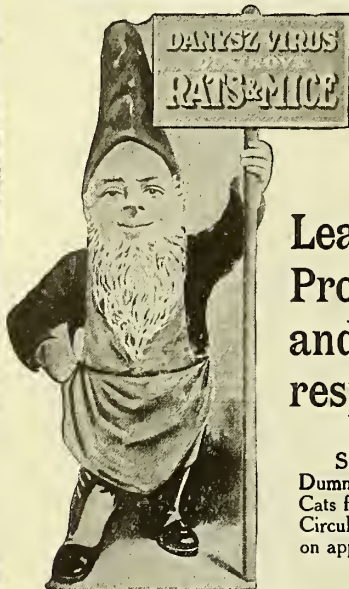
SENT ON RECEIPT OF TRADE CARD.

NITSCHÉ & GUNTHER
OPTICAL CO., LTD.,

66, Hatton Garden, London, E.C.

DANYSZ VIRUS

Is on the P.A.T.A. List.



Retail Prices:

2/-
per single tube,
5/-
for three tubes,

Leave you a
Profit of 75%
and 50%
respectively.

SHOWCARDS,
Dummy Boxes, Clockwork
Cats for Window Display,
Circulars, Postcards, &c.,
on application.

Through your Wholesale House, or direct from

DANYSZ VIRUS, Ltd.
(Dept. 352) 52 Leadenhall Street, LONDON, E.C.

LISTERINE

The Popular American Antiseptic.

A non-toxic antiseptic of known and definite power prepared in a form convenient for immediate use; of ready dilution, slightly, pleasant, and sufficiently powerful for all purposes of asepsis—these are advantages which Listerine embodies.

The success of Listerine is based upon merit, and the best advertisement of Listerine is—Listerine.

LISTERINE DERMATIC SOAP

Designed to meet the most exacting requirements of a saponaceous detergent for use in the antiseptic treatment of diseases of the skin. No animal fats, and only the best vegetable oils enter into its composition, and of these it contains a surplus, "superfatted." It is a bland, unirritating and remarkably efficient soap.

LISTERINE TOOTH POWDER

This powder is not intended to supplant Listerine in the daily toilet of the teeth, but is offered in response to the demand for a frictionary dentifrice to be used in conjunction with this well-known and time-tried antiseptic.

Listerine Tooth Powder, like Listerine, will advertise itself by its intrinsic merit.

BRITISH TRADE SUPPLIED BY

MAW, SON & SONS, 7 to 12 Aldersgate St., London, E.C.

General Agents for Great Britain

FOR DESCRIPTIVE LITERATURE, ADDRESS—

LAMBERT PHARMACAL CO., St. Louis, U.S.A.

Support those who support you. On the P.A.T.A. 40% Minimum Profit.

ORDER

JOHN BOND'S

"CRYSTAL PALACE" MARKING INK

Supplied to the Royal Households, and awarded 45 Gold Medals, &c.

Heat or Non-Heat.	Protected Minimum Price.	Minimum Price to the Retail.	Minimum Price to the Wholesale.
6d. size 1s. "	4d. per bot. 8d. "	2/9 doz. net 5/6 "	30/- gross net 60/- "

100 Years' WORLD WIDE Reputation.

FREE

and enclosed with every 6d. and 1/- Bottle a Voucher entitling purchasers to their name or monogram Rubber stamp with Pad and Brush, also enclosed with enlarged 1/- size a Linen Stretcher and Pen and Holder.

Can also be obtained in Bulk by the Gallon, Pound, or Ounce.
Depot for HENRY BOND'S ORIGINAL INDELIBLE "OAK TREE" HEAT OR NON-HEAT MARKING INK, 75 Southgate Rd., London, N.



You Need This!

ONE sales pulling piece of advertising literature prepared exclusively for you, that serves several purposes and advertises you in more than one way. Obey the impulse and write now for Particulars.

F. A. DEGEN (Fellow Inc. Soc.,
Advert. Consultants),
c/o "C. & D.," 42 CANNON ST.,
LONDON, E.C.

Wholesale Drug Houses are invited to write to

MELROSE-DROVER, LTD.

LEITH,

for Prices and Samples of NON-DEPOSITING

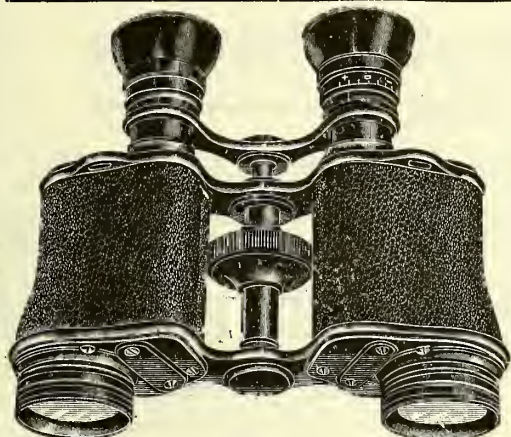
ORANGE WINE

B.P. 1898.

considered the best in the Market due to superior quality. Specially prepared also for exportation.

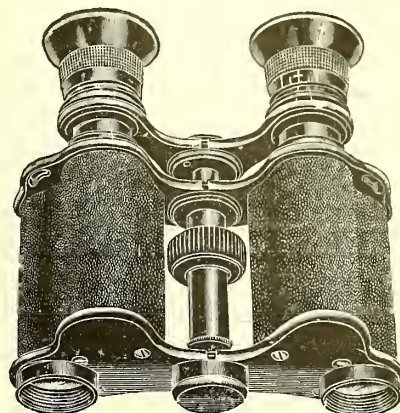
F. DARTON & CO. MANUFACTURING OPTICIANS ::

142 ST. JOHN'S ST. and 52 Clerkenwell Rd., LONDON, E.C.



Darton's New Stereo-Prism Binocular,
with large object glasses, giving enhanced stereoscopic effect, eight times magnification. In best quality solid leather case, equal in power and finish to any of the well-known makes. Can be retailed at a good profit at $\frac{1}{2}$ the price.

Retails at 90/-



The Exceptional Wide Angle Prismatic Binocular,
with central adjustment, adjustable eye-piece magnifying 8 times the object, glasses being placed at the outer edge of the body giving an enlarged field of view. In solid leather case.

Retails at £3

The following Illustrated Trade Lists, with discounts, forwarded free on receipt of Trade Card:—

FIELD and OPERA GLASS, TELESCOPES, etc., TINTED EYE PRESERVERS, CYCLIST'S MOTOR GOGGLES, GENERAL OPTICAL GOODS, ELECTRIC NOVELTIES, MOTORS, DYNAMOS, FLASH LAMPS, etc., ANEROID BAROMETERS, THERMOMETERS.

POP

PAPERS & POSTCARDS

To compete with anyone on QUALITY & PRICE.

YOUR OWN LABELS OR UNBRANDED.

Write for Specimen Labels, Samples, and Prices.

RAJAR LIMITED, Mobberley, England.

Speciality:
Chemists'
Enlargements
and ALL
Practical
Photographic Work.

ROLL FILMS DEVELOPED

AND DESPATCHED DAY AFTER RECEIPT.

Express Developing Co.,
86, High St., Whitechapel, E.C.

Contact
Prints.

Coloured
Miniatures.

Post Cards.

Carbons.

Send for Price List of our Profitable Chemists' Side Lines.

S. CLABER & CO., Ltd.

Proprietors of JAGO & JEROME

Perfume Manufacturers

ALL CLASSES.

ADDRESS: 28 Canal Street, MANCHESTER.

AIDS TO FORTUNE

The following SEASONABLE LINES have sold on their merits for 20 years from 3 to 5,000 annually, and any Chemist purchasing recipes may do equally well.

"FLORAL CREAM"

An inseparable lotion of the consistence of cream. Non-greasy or sticky, entirely absorbed. Most elegant appearance, rapidly cures Chaps and Roughness, beautifying the complexion. Nothing better buyable and suitable for the million.

"GLYCCO"

An ideal Cough Syrup for Children and Adults: Very Pleasant; Rapidly Efficacious: Cures after others fail; Will keep indefinitely, and is brilliant. Specially useful for Bronchitis. A good family cough mixture.

"VIR-UNG"

A Balsamic Cerate for all Skin Ailments. Contains no mineral or other injurious ingredient, can be well recommended for Piles, cures Eczema and kindred Skin Troubles. Better than any advertised salve and can be sold with excellent profit.

Recipes 2/6 each with full instructions for making (all very easy), together with 25 no maker's name labels, samples of any post free for 6d.

YOU CAN GIVE GOOD VALUE to CUSTOMER & STILL MAKE MORE THAN HALF PROFIT WITH A CERTAINTY OF REPEAT ORDERS.

I shall appreciate communications from my (5,000) home and (600) foreign and colonial Patrons and be pleased to answer any queries. PLEASE NOTE NEW ADDRESS:

TOM BROOKS, "BEVERLEY," EAST BARNET, HERTS.

LIST OF OTHER SPECIAL RECIPES POST FREE.

PERFUMERY FOR XMAS

Orders for "Own-Name" Perfumes should be sent without delay to prevent disappointment.

5 % discount monthly a/c	6d. Oval, Round or Square Sprinklers, per doz.	4/-
	1/- Stopped	8/-
	1/6 "	13/6
	2/- "	17/6
	2/6 "	22/6
	3/6 "	27/6
	5/- "	34/6

We print Customers' Names on 6 doz. Assorted.
CUSTOMERS OWN CHOICE OF PERFUMES.

FANCY BOXES AND CASES

at various prices from 6½d. retail up.

THE LATEST NOVELTY

Ready shortly. A stoppered Tube of concentrated one-drop essence (various names) with Metal Cap over stopper, 12 on a pretty showcard. Per Card 4/6. A great demand must arise for this line. Orders executed as quickly as possible.

F. NEWBERRY & SONS, LTD.,

WHOLESALE PERFUMERS,

27 & 28 Charterhouse Square, LONDON, E.C.



TOILET SPECIALITIES

J. TOUZEAU SAUNDERS, Ltd.

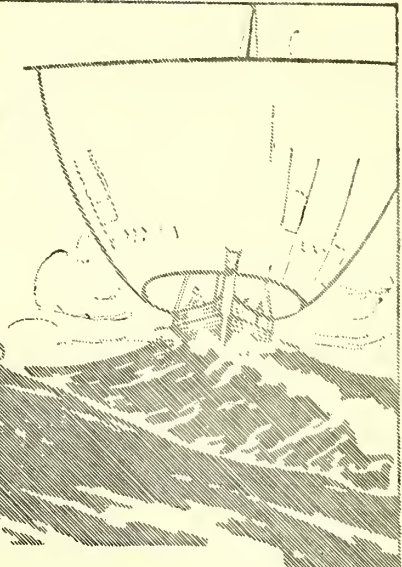
Write for Price List and Advertising Matter to.

98 St. JOHN STREET, E.C.

'KEPLER' SOLUTION

(TRADE MARK)

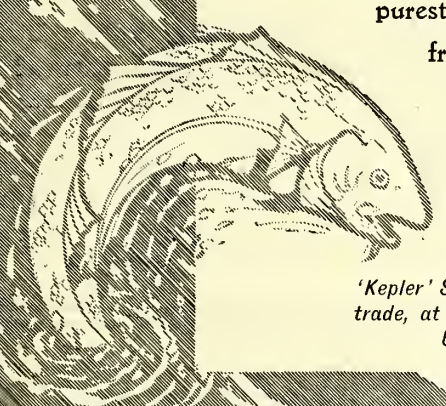
OF COD LIVER OIL IN MALT EXTRACT



The Customer is always pleased with 'KEPLER' SOLUTION and the results of using it.

He associates the good effects with you. By association of ideas he comes to look upon your pharmacy as the place where he is sure of getting the best and purest. He buys other things from you for this reason.

Thus you gain his confidence and capture the whole of his custom.



'Kepler' Solution is supplied to the trade, at 22/0 and 39/0 per dozen bottles. Subject

BURROUGHS WELLCOME & CO., LONDON



NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN
SHANGHAI BUENOS AIRES

London Exhibition Room: 54, WIGMORE STREET, W.

G. 441

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Pure for Pharmaceutical Purposes

The

B. D. H.
P. P. P.

 Bird-on-Gate Brand Chemicals, manufactured by us in our own laboratories, are produced with the view to meeting all the requirements of the modern high-class pharmacist.



Every package bearing this warranty label
can be absolutely relied upon to conform to the definite and
stringent

"P. P. P."

PUBLISHED SPECIFICATIONS.

THE BRITISH DRUG HOUSES, Ltd.,

22 to 30 GRAHAM STREET, CITY ROAD, LONDON, N.





A Weekly Journal of the Chemical and Drug Trades
and of
British Pharmacists throughout the Empire.
ESTABLISHED 1859.

The CHEMIST AND DRUGGIST is the leading journal addressing the chemical and drug trades of the British Empire. It is adopted as an official journal by nineteen Chemists' Societies in Australia, Ireland, New Zealand, South Africa and the West Indies, and its paid-in-advance circulation in Great Britain and all Countries having business relations with the British Empire is intrinsically and numerically unique.

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Summary of this Issue.

The more notable items only are dealt with.

Articles and Communications.

For a series of formulæ for mouth-washes see p. 49.

The quantitative determination of creatinin and creatin in urine is described on p. 68.

The earliest formula for effervescing carbonate of iron is given in our Retrospect (p. 68).

Last week's questions regarding the return of oil and spirit drums are replied to on p. 66.

The chemist's window which took the "Erasmic" first prize of 25*l.* is figured and described on p. 49.

It is suggested in a communication on p. 66 that ext. cannabis indicæ should be made from hashisch.

Particulars of the new declarations required for the exportation of spirits to Australia are given on p. 48.

Mr. Wippell Gadd points out that the proposed modification of the barium-test for spt. ammon. arom. does not accord with Mr. F. C. J. Bird's prescription (p. 65).

"Diuretin" was the word in the last facsimile prescription upon which competitors stumbled, and none did the directions correctly. See report and another facsimile on p. 49.

Further questions regarding mineral-acid bottles and labels are replied to on p. 67. We point out that the Act and regulations do not specify the colour of the bottles or labels.

The comparative stability of alcoholic solutions of ethyl nitrite is proved by Mr. James Grier, M.Sc., in a series of experiments described on pp. 43-44. Mr. Grier shows how the forms of stoppers affect the quality of "sweet nitre."

The present position of pharmaceutical reciprocity is discussed, with the Canadian Pharmaceutical Association's deliberation on the subject as the text. We indicate that other parts of the British Empire besides Canada are not ripe for Imperial reciprocity (p. 47).

News of the Week.

Those who passed the Minor examination this month are named on pp. 57 and 58.

The Local Government Board is applying the fair-wages condition to contracts (p. 41).

New Zealand has new Customs regulations respecting opium and its preparations (p. 36).

Dr. Ehrlich has made a statement regarding the benefits and toxicity of salvarsan, which is reported on p. 37.

Sir S. A. Sadler, F.C.S., formerly M.P. for Middlesbrough, and its Mayor on three occasions, has died (p. 38).

The Home Secretary has intimated that he will sacrifice the Sunday-closing provisions of the Shops Bill in order to pass it this Session (p. 35).

M. Eugène Léger, of Paris, received the Hanbury medal on Wednesday, and in acknowledging it made an interesting statement regarding the continued popularity and use of old drugs, in spite of new remedies (p. 53 and p. 46).

The German wholesale suppliers of spirit have petitioned the Federal Council to amend certain clauses in the Spirit-duty Bill, so that greater facilities can be given to spirit-production; otherwise it is claimed the production will be inadequate to meet trade requirements (p. 37).

The National Insurance Bill is to be passed when Parliament resumes its sittings this month. So Mr. Lloyd George and Mr. Churchill say. The Fifehire Pharmaceutical Association have formulated a motion regarding contracting out, which has been submitted to the Pharmaceutical Council (p. 53).

The address to the students at the opening of the School of Pharmacy, Bloomsbury Square, this week, was by Dr. Macdonald Brown, a "Minor Man," who spoke on pharmacy, pharmacists, and pharmaceutical affairs with verve and humour. We give a verbatim report of it (pp. 53-57), and comment upon points arising from it (p. 47).

Trade and Market Matters.

The position of the Camera Agrumaria in regard to the future supply of citric materials is discussed in an article on p. 64.

The chemical and drug markets are fairly active, with a goodly number of price movements. Cocaine is 10*l.* up, and quicksilver 2*s.* 6*d.* lower "officially." Balsam tolu, benzols, hydrastin, and juniper-berries are dearer, while arsenic, copper sulphate, valerian, Curaçao aloes, cocoa-butter, and lycopodium are cheaper (p. 61).

ENGLISH AND WELSH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

A poison licence has been granted to Mr. A. E. Scott, drug merchant, North Cave, Yorks.

The employes of Messrs. Parkinson & Sons, wholesale druggists, Burnley, went to Blackpool last week for their annual outing.

Mr. L. N. Burch, chemist and druggist, Chard, has had his shop-window smashed. It was caused by a horse, frightened by motor-cycles, jumping through the plate-glass window.

The Whitby chemists have arranged the following hours of closing from October 1 to May 31: Monday, Tuesday, and Thursday, 7 p.m.; Friday, 8 p.m.; Saturday, 9.30 p.m.; Wednesday, half-holiday.

The Wrexham Bench have granted a transfer of the wine-licence at 2 Hope Street from Mr. Alfred William Barker, chemist and druggist, to Mr. Walter Thomas Harlowe, chemist and druggist.

A fire occurred on September 26 at the premises of Mr. S. H. Clegg, chemist and druggist, 71 High Street, Oxford. Although the flames were speedily extinguished, a considerable amount of damage was done.

The London County Council have just made a grant to the Battersea Polytechnic to enable them to purchase a small soap-making plant, which will afford students at the soap-making classes an opportunity of becoming familiar with the working details of the manufacture.

The "Bethnal Green News" of last week called attention to the fact that Messrs. Potter & Clarke, Ltd., will celebrate next year the centenary of their business, and adds: "There have been four successive Henry Potters as partners in the firm. The Mayor (Alderman H. Potter, J.P.) of Stepney has been for fifty years in the firm."

Objection was taken at a meeting of the Birkenhead Board of Guardians on September 26 to the payment of 4*l.* 4*s.* a week to Mr. Edward A. Naylor, chemist and druggist, who was acting as temporary dispenser; but the Clerk pointed out that the salary of the dispenser, Mr. Richard Preece, who was ill, was 3*l.* per week. The objection was overruled.

An outbreak of fire occurred last week at the chemical works, Berkhamsted, of Messrs. William Cooper & Nephews. A sulphur refining machine suddenly burst into flame, and Edward Finnigan, one of the senior employes, was badly burned about the chest and face. Another employe named Bates was also injured. The outbreak was under control within an hour. The injured men are making favourable progress.

As the result of representations of the Postal, Telegraph, and Telephone Committee of the London Chamber of Commerce to the Postmaster-General full-size samples may now be forwarded by sample post. The concession is regulated by the following notice:—"It is recommended that every sample should be marked 'Sample—not for sale,' or otherwise defaced in such a way as to render the article unsaleable in the ordinary way of trading."

From Various Courts.

At Woburn on September 29, Edwin Darby, Todding-ton, was fined 2*s.* 6*d.*, and 20*s.* costs, for selling sweet spirit of nitre which was deficient in ethyl nitrite to the extent of 74.5 per cent.

Mr. Alderman Roll, sitting in the London Guildhall on October 4, held that a pistol 9½ in. long made to fire cartridges containing a mixture of lycopodium, pepper, snuff, etc., is a pistol within the meaning of the Pistol Act.

At Lambeth on October 4, William C. Stoughton (54), a brewer, was sentenced to three months' hard labour for stealing 2 lb. of saccharin, value 2*l.* 8*s.*, and a bottle of raspberry cordial, value 6*d.*, from his employers, Messrs. R. White & Sons, mineral-water manufacturers, Camberwell.

At Sheffield Quarter Sessions on October 2, Wm. Goodey (35) and Walter Clift (31), steel-dressers, were sentenced to eight months' imprisonment with hard labour for com-

mitting burglary on July 9 at the house of Mr. Percy Carr, chemist and druggist, 11 Endcliffe Vale Road.

Two further charges of murder by poison are to be preferred against Edith Agnes Bingham. At Lancaster Police Court on September 28, accused was remanded until October 5, pending the completion of the analyst's report. It is stated that arsenic has been found in the exhumed bodies of prisoner's father and sister.

At Southampton last week, an electrician named Henry Jones was charged with stealing ointment, dental enamel, and tooth-paste, valued at 15*s.* 9*d.*, from Mr. Francis Blake Wride, chemist and druggist, Lime Street, Southampton, between September 6 and 21. The man had been employed at the premises fitting up electric light. He pleaded guilty, and was bound over for six months.

At the inquiry into the death of Emily Rendall (29), of Hoxton, who died in consequence of an illegal operation, deceased's sister said that deceased obtained some medicine from a chemist, who told her that if it did not do her any good she should go to a woman named Elizabeth Bruder, who now stands remanded at East Ham Police Court. Witness begged her not to go, but the deceased said that if she did not she would either take poison or drown herself. To pacify her sister the witness accompanied her. Joseph Moody, of Popham Road, Islington, the "chemist" referred to, stated that he was not a qualified chemist, but had a qualified assistant. He had no recollection of ever having seen her before that day. Neither did the witness know Mrs. Bruder. He had never given any woman a card such as that produced.

A Chemist's Assistant's Vote.

At the Barnstaple Division Revision Court on September 27, before Mr. R. G. Seton (barrister-at-law), William John Thorne, a chemist's assistant, claimed a lodger's vote for 40 Elm Grove, Bideford, his father's house. Mr. Ffoulkes called the barrister's attention to the fact that the father claimed for this house in succession from Elmsleigh Terrace, and the claimant could not have been there for six months. The barrister declined to allow the claim, impounded it, and instructed a police constable to inform the claimant that he must appear before him at the Barnstaple Court. This the claimant did on the following day, when he explained that it was incorrect for him to say in the declaration that he had occupied the room for twelve months, and he expressed regret. Mr. A. E. Hooper and Mr. Forster appealed to the barrister for clemency, and Mr. Seton said he had no alternative but, on instructions from the Public Prosecutor, to forward it. It would be a warning to the young man and also to others. He should not suggest proceedings being taken, but the matter must be referred to the Public Prosecutor.

Birmingham Notes.

Among the exhibitors at the Everything for the Home Exhibition now being held in Bingley Hall are the Eucryl Co., Ltd., of Hull, and Coleman's, Ltd., of Norwich, who show Wincarnis. The Baby Incubator Co.'s exhibit with living babies attracts much attention.

At the invitation of the Dean of the medical faculty of the University (Dr. Earling) a select number of exhibitors of drugs and scientific instruments gave a display at the Introductory Sessional Convention on Monday, October 2, at the Mason College Buildings. Amongst these were Messrs. Southall Bros. & Barclay, Ltd., Salt & Sons, P. Harris & Co., and Anderson & Dodds, of Broad Street. Messrs. Southall's exhibit was in charge of Mr. Bennison, their radium expert. Mr. H. S. Short-house was at hand to answer questions for his firm. The pharmaceutical preparations were not large nor varied, but the vaccines and sera occupied a very conspicuous part of the exhibits.

IRISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Pharmaceutical Society of Ireland.

The annual meeting of the members took place at 67 Lower Mount Street, Dublin, on October 2, and the Council-meeting on October 4. Reports of these will be

given in our next issue. It may be noted, however, that Sir William Baxter was on Wednesday re-elected President, Mr. D. M. Watson Vice-President, and Mr. George Beggs Treasurer.

Brevities.

The Antrim Board of Guardians on September 28 appointed Mr. Blake, F.I.C., Belfast, analyst at a salary of 20*l.* per annum.

Mr. D. W. Elliott, Ph.C., Shaftesbury Square, and Mr. A. R. Hogg, R.D., have been appointed Vice-Presidents of the Belfast Young Men's Christian Association Camera Club.

Mr. C. A. Wray, Ph.C., Magherafelt, Co. Londonderry, has disposed of his premises to Mr. S. S. Badger, Ph.C., of the same town, who will carry on the business under his own name from November 1. Mr. Wray's address for the present is Gleninagh, Cookstown, Co. Tyrone, but in the spring he contemplates taking a trip to Canada.

The Belfast Corporation on October 2 confirmed the action of the Public Health Committee in determining the contract of Messrs. John Clarke & Co. (in liquidation) for the supply of drugs to the Purdysburn Fever Hospital and accepting the tender of Messrs. Ben Clarke & Co., Donegall Street, for the remainder of the year.

The ceremony of naming a new lifeboat took place at Wicklow on September 27 by the Countess of Wicklow. During the proceedings Lieut. Rigg, District Inspector of Lifeboats, complimented very highly the Hon. Secretary, Mr. Robert M. Lees, Ph.C., for the high state of efficiency in which the lifeboat station is maintained. Mr. Lees' son has charge of the motor of the new boat, and we note that Miss Greeta Lees, his daughter, on this occasion headed the list of collectors for the Lifeboat Fund, while assistance in collecting was given by their fine retriever.

An echo of the Irish railway strike was heard at Lurgan (co. Armagh) Board of Guardians on September 29, when Messrs. Boileau & Boyd, Dublin, wrote stating that they regretted they could not comply with the Guardians' suggestion to send the medicines ordered by Lurgan No. 1 and Aghalee dispensary districts by passenger-train, as they were too bulky and would not be accepted by the railway company. They hoped, however, to forward the medicines in a few days, when they expected the labour troubles would have subsided somewhat. The Navan Guardians and the Clogheen Guardians are also complaining of delay in the delivery of medicines, which is put down to the labour troubles.

SCOTTISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Aberdeen and the North.

Mr. William Crockart, chemist-optician, formerly of Montrose, has recently opened a new pharmacy at 111 High Street, Brechin.

McKenzie & Sons, wholesale and retail herbalists and surgical-instrument dealers, 22, 24, and 26 Marischal Street, Aberdeen, have changed their style to McKenzie & Lowe, Mr. McKenzie and Mr. C. G. M. Lowe being the partners.

The Shops Bill.

Mr. Winston Churchill has visited his constituents at Dundee this week, addressing them on Tuesday and Wednesday evenings. On the latter occasion he mentioned the Mines Regulation Bill, the Shops Bill, and the National Insurance Bill as measures which are to be passed in the Autumn Session. As to the Shops Bill he said:

Shop assistants are a class not very well organised to look after themselves, and who lead, he thought, unnecessarily hard lives. Retailers themselves want to close their shops earlier and more often. The public can perfectly well manage to do its shopping in a much shorter period. There are no economic arguments against the Bill, but when they came to put the principle into a Bill they found different interests affected, each of which looked at the measure from its own point of view, and wanted to have it so shaped as to help that particular interest, and was not very particular as to whether an equal measure of assistance was meted out to other separate and possibly conflicting interests. The

Government had to aim at holding the balance carefully between those classes and categories. After comparing the decision on the Bill to Solomon's judgment on the live baby, Mr. Churchill said the Bill would effectively stop the increase of Sunday trading, and he was prepared to subject the Bill to a very practical test. If they learned, when Parliament reassembled, through the ordinary channels that the opinion of those who are in favour of Sunday closing throughout the country is adverse to the Sunday clauses in the Shops Bill, he was prepared, if they wished it, to leave the Sunday clauses out of the Bill altogether, to leave the existing state of things unaltered, and to leave to other hands and future years the task of dealing with this question.

Edinburgh.

A detective officer has been making inquiries regarding sales of arsenic and strychnine, a few more dogs having recently succumbed to poisoning.

Dr. Joseph Bell, who died at his residence, Mauric Wood, Midlothian, on October 4, in his seventy-fourth year, was the original of Sherlock Holmes, being adept in applying the methods of Zadig in diagnosis.

Claims against the late Mr. J. C. Laird, Ph.C., or his firm of G. H. Laird & Sons, 40 Queensferry Street, Edinburgh, are to be lodged with Messrs. Cornillon, Graig & Thomas, S.S.C., 15 South Charlotte Street, Edinburgh.

Glasgow and the West.

Several employes in the Campsie Alum Works, Dumbartonshire, have been paid off. This branch of chemical industry has been very quiet for a considerable period.

Mr. David Graham, chemist, Penang, Straits Settlements, is at present on holiday in Scotland. Mr. Graham was an assistant in the West of Scotland about twenty-five years ago.

Messrs. Wm. Wallace & Co., chemists, 71 St. Vincent Street, Glasgow, are making their annual lavender show. Several hundredweights of very fine flowers from Marseilles are displayed in the windows in the form of large castles of flowers, and bags of lavender in silk and muslin are scattered about. The window is beautifully draped with lavender muslin, and the display is resulting in good business.

The classes for pharmaceutical students at the Glasgow and West of Scotland Technical College were resumed last week, chemistry being taught by Professor G. C. Henderson, B.Sc., F.I.C.; botany by Dr. David Ellis, F.R.S.E.; and materia medica and pharmacy by Mr. Peter Irvine, Ph.C., who has succeeded Mr. James Grieve, Ph.C., F.C.S., who has left the city. Mr. Irvine gave his opening lecture on Friday evening, September 29, when ten pupils were enrolled.

POISONING FATALITIES.

Of the seven deaths reported this week as caused by poisons, one was due to misadventure.

Aconite and Cocaine were used as suicidal agents by Walter Waltherhouse (59), dental surgeon, Westminster, London, S.W., who poisoned himself in Battersea Park.

Ammonia was used for suicidal purposes by an Oldham woman named Mary Jane Brennan.

Carbolic Acid was the agent used for self-destruction by Louisa Hall (22), cash checker, Clapham, who poisoned herself in Epping Forest.

Narcotic-poisoning, according to the medical evidence, caused the death of an unknown man, who was found dead in a bed at Rowton House, Arlington Road, London, N.W. A bottle containing an opium preparation was found in a pocket of deceased's coat. The Coroner's jury found an open verdict.—Annie Rebecca Buckley (36), tailoress, Fulham, was found lying dead on a couch with an empty bottle which had contained laudanum in her hand. At the inquest Mr. Herbert Brown, chemist, deposed that he supplied deceased with some laudanum to make a poultice. Dr. Frear attributed death to kidney disease, and said he could find no trace of laudanum in the body, but death might have been accelerated by it. The jury returned an open verdict.

Rat-poison.—At Hackney, Jane Steventon (31), confectioners' packer, committed suicide by taking rat-poison.

Soldering-fluid composed of spirit of salt and zinc chloride was drunk with fatal results by the ten-year-old son of a Gateshead back-overman named W. R. Wilson. At the inquest a verdict of death by misadventure was recorded.

FRENCH NEWS.

From the "C. & D." Paris Correspondent.)

CODEx IN SANTO DOMINGO.—The French Codex of 1908 has been adopted as the official Pharmacopœia of the Republic of Santo Domingo. The law will become obligatory throughout the Republic six months after July 26, 1911.

THE MONUMENT TO BERTHELOT which is to be placed in the Luxembourg Gardens, no great distance from the Paris Superior School of Pharmacy, where he made his most famous discoveries, is by the sculptor Saint-Marceaux, who has placed on the pedestal a bas-relief of the features of Renan, the intimate friend and fellow philosopher of the great chemist.

OBITUARY.—The death occurred at his residence, 84 rue Bonaparte, Paris, on September 30, of the eminent French chemist, Louis Joseph Troost, at the advanced age of eighty-five. M. Troost entered the Superior Normal College at Paris in 1848, and secured his degree of Doctor of Sciences in 1857. After a distinguished career as a chemist he was appointed Professor at the Paris Faculty of Sciences in 1874. He was elected a member of the Paris Academy of Sciences in 1884 on the death of Wurtz, and held the high rank of Commander of the Legion of Honour.

INTERNATIONAL PHARMACOPEIA SECRETARYSHIP.—A letter was addressed to the French Minister of Public Instruction some time ago by the Belgian Government relative to the eventual creation of an International Secretaryship of Pharmacopœias, with the head office at Brussels. The matter has been under the consideration of the Paris Academy of Medicine, and as a result of a report drawn up by M. Yvon, that body has voted in favour of the proposal, with a view to following up the work of the Conference in Brussels. It is stated that the Governments of Austria, Denmark, Spain, Holland, Italy, Norway, Russia, and Switzerland have already sent favourable replies in support of the suggestion.

AN ANECDOTE OF KING GEORGE.—M. Jacques Bardoux's biographical notes of George V. in his "middy" days contains an amusing anecdote which may be new to some C. & D. readers. The paragraph runs as follows:

The changing of shop-signs was another favourite and more risky amusement. One fine morning the Dartmouth pharmacist found a coal-dealer's notice-board over his window, while the latter was astonished to find his coal-store surmounted by the apothecary's pestle and mortar. This was all very well, but when it came to placing marlinspikes in the first lieutenant's bed disciplinary measures were resorted to, and the "Herring" (as the future monarch of the British Empire was then familiarly termed) had his leave stopped for a week, which seems to have had the desired effect.

PHARMACY AND THE FRENCH ASSOCIATION.—A report recently published states that the experiment of organising a "Pharmacists' Day" at Dijon during the annual meeting of the French Association was a particularly happy one. So many papers on pharmaceutical subjects were sent in that the "day" had to be commenced on the preceding evening, such well-known names as those of Dr. Barillé (army pharmacist), Professor Moureu and Professor Delepine of the Paris Superior School of Pharmacy, MM. Lepinois, Collard, Oudin, and Tassily being on the programme, as well as those of seven or eight local pharmacists. The congressists visited the pharmacy of Dijon Hospital, where the old woodwork and drug-jars of 1740 aroused general admiration, the disinfecting works, and a couple of local pharmaceutical factories. The banquet was also a great success, MM. Buchet and Vaudin, of Paris, the two Paris Professors and a Dijon colleague, several army pharmacists, as well as M. Kauffeisen and numerous local practitioners, being present.

PROFESSOR ANTHONY, who has been investigating the causes and cures of beri-beri, blackwater-fever, and sleeping-sickness in various parts of Africa, arrived at Plymouth last week on the liner *Mandingo*. He states that he has discovered a cure for blackwater-fever by the injection of an arsenical preparation, and secured 93 per cent. of successes.

AUSTRALASIAN NEWS.

"The Chemist and Druggist" is regularly supplied by order to all the members of nine Societies of Chemists in Australia and New Zealand, as well as to other Chemists in business there.

The Commonwealth.

THE RETURNS for June show that the exports of Australian origin were valued at 3,891,153*l.*, compared with 3,452,461*l.* for the corresponding month of last year. The imports of drugs and chemicals in June were valued at 93,254*l.*, compared with 78,596*l.* in June of last year. The total imports for June were valued at 4,854,791*l.*, against 3,899,010*l.* in June 1910; while the total exports were 4,208,671*l.* and 3,637,806*l.*

DENATURED SPIRIT.—Under Customs Order (No. 1454) just issued, spirits denatured by the following methods may be admitted free for the purposes specified—viz., spirit, methylated by the addition of 1 per cent. of absolute phenol, for the use of public hospitals; spirit, methylated by the addition of 5 per cent. of approved wood naphtha, for the use of public museums; spirit, methylated by the addition of not less than 5 per cent. by volume of pure methyl alcohol, for the use of universities. The personal bond of the principal officer of the institution concerned, with one surety, must be provided.

New South Wales.

PHARMACEUTICAL SOCIETY.—The monthly meeting was held in Sydney on August 8. There were present Messrs. A. Wadsworth (President), L. P. Williams, W. Blackall, W. Short, T. S. Loney, T. M. Snelson, A. E. Sharpe, and F. P. J. Gray. The Board of Health forwarded 350 copies of the pamphlet, "How to Take Care of Babies in the Summer Months," for distribution among the members. A letter was read from E. Merck, Darmstadt, stating that he would forward as soon as possible a collection of materia-medica specimens, which he hoped would be instrumental in spreading a knowledge of materia medica generally among the members. A letter was read from the Council's solicitors giving the opinion that, in the absence of contributory negligence, the firm of printers to whom was entrusted the MS. of the "Australian Formulary" could not be held responsible for the loss of the MS., which was burnt in the fire that destroyed the printers' premises. Mr. Wadsworth explained that the only object in getting quotations was to obtain the best prices possible. It was resolved to send a circular to every chemist in New South Wales regarding the sale of methylated spirit and chlorodyne.

New Zealand.

OPIMUM SALE.—Under the Opium Prohibition Act, new regulations have been gazetted cancelling those previously issued. A proclamation in the same number of the "Gazette" declares that the articles and preparations specified to be opium, which, though not suitable for smoking, may yet be made suitable, are to include the following:

- Opium, crude.
- Opium, in powder.
- Opium, solid extract of.
- Opium, in mixture with other substances (if such mixture may be made suitable for smoking).
- Opium, liquid extract of.
- Opium, tincture of.
- Opium, sedative liquor of.
- Opium, wine of.
- Sydenham's laudanum.

Solutions or liquids containing opium, or moist or semi-liquid preparations containing opium, and which are in a form which may be made suitable for smoking.

No one is allowed to import any of these articles unless he holds a permit. Any importer and every person who purchases from an importer, is to keep a book giving full particulars of the sale of opium. One of the regulations is as follows:

No person (other than an importer who disposes of opium to the persons or classes of persons enumerated) shall during any period of seven days sell opium to any other person in larger quantities in the aggregate than: Of opium in solu-

tion or liquid form not containing more dry extractive matter than 6 per cent., when evaporated for two hours on a steam-bath, 1 fluid oz.; of opium in any other form, 20 grains.

THE SALE OF POISONS AMENDMENT BILL, read a first time in the House of Representatives, introduces some new features. The administration is to be in the hands of a Sale of Poisons Board, and there will be two classes of licences—chemist's and storekeeper's. Every registered chemist and every wholesale dealer will be entitled, on application to the Registrar, to receive a licence and to be registered as the holder of such licence. This will give him the privilege of selling Parts 1 and 2 poisons. Any other person may apply to the Registrar, and on production of a certificate from a Justice or an authorised person that he is a fit and proper person to be allowed to sell poisons the Board will be entitled to grant a storekeeper's licence, which gives the privilege of dealing in poisonous substances to be exclusively used in agriculture or horticulture, strychnine preparations for the destruction of birds and rabbits, sulphuric, hydrochloric, and nitric acids, sulphocyanides and potassium ferricyanide specially prepared for photographic use, mercuric-iodide preparations for the same purpose, liquid preparations of carbolic acid and its homologues for use as sheep-wash, for agriculture, or horticulture, or for disinfecting, and neutral oxalate of potassium. The licence-fee in each case is 5s. per annum. One licence cannot be taken out to cover the various branches of a business, either of pharmacy or of any other. Clause 18 enacts that no person may sell morphine or cocaine or their salts and preparations for hypodermic injection except in cases where specified in a prescription or order of a registered medical practitioner. Medical practitioners and veterinary surgeons are allowed to sell poisons as medicines, so also is a person registered as the holder of a chemist's licence, if in each case the medicine is labelled with the name and address of the vendor and the ingredients thereof are entered, with the name of the person to whom it is sold or delivered, in a book kept for that purpose. "Wholesale dealer" is defined in Clause 2 as "any person whose principal business is that of wholesale dealing in drugs."

SOUTH AFRICAN NEWS.

(From "C. & D." Correspondents.)

"The Chemist and Druggist" is regularly supplied by order to all the members of the seven Societies and Association of Chemists in British South Africa, as well as to other chemists in business there.

Cape of Good Hope.

Mr. A. H. HINTON, who has been appointed South African manager for the Sheldon Drug Co., Ltd., has opened an office in Parker's Buildings, Cape Town. It is the intention of the company to open up business throughout the whole South African Union.

Orange Free State.

PERSONAL.—Mr. H. Greenwood, who is Messrs. Petersen's traveller in the Orange Free State, has returned to Bloemfontein with his family after a trip to England.—Mr. S. S. Hewitt has returned to Bloemfontein and resumed the management of Messrs. Heynes, Mathew & Co.'s wholesale and retail business there.

POISONING CHARGE.—The trial of Dr. William Woodward on a charge of culpable homicide took place at the Circuit Court at Kroonstad on September 6, Sir Andries Maasdorp, Chief Justice, presiding. In March last the accused dispensed strychnine for a Miss Hartley in mistake for chloral hydrate, and death resulted. The accused pleaded that while dispensing he was also occupied in endeavouring to cheer up the deceased, and did not exercise his usual care. Also that the bottles were of similar appearance. A verdict of "Not guilty" was given.

O.F.S. MEDICAL AND PHARMACY COUNCIL.—At the monthly meeting, held on September 8, there were present: The President (Dr. Ward), Drs. de Kock, Pretorius, Tomory, and Usmar, Mr. Whiteside (dental member), and Mr. S. S. Hewitt (pharmaceutical member). With the leave of the President, Mr. Hewitt made a statement in reference to his resignation, sent in on February 8. The Presi-

dent himself had resigned previous to the receipt of the letter, and the President alone could accept the resignation of a member of the Council. Mr. Hewitt, a short time prior to the election of a new President in August, wrote to Dr. Ward from Cape Town stating that he desired to withdraw his resignation. He wished to leave the matter now in the hands of the Council, as they appeared to have a discretion in the matter under regulations 15 and 16. The meeting agreed to accept Mr. Hewitt's withdrawal of his resignation.

OUR GERMAN LETTER.

(Special Correspondence to the "C. & D.")

The Alcohol Industry.—The President of the Association of German Wholesale Spirit Merchants has addressed a memorial to the Federal Council demanding the extension of the duty-free distillers' "contingent," as an alternative to total exemption from duty. The demand is based on the insufficiency of this year's potato crops, while it is now recognised that the German output of spirit will be quite inadequate to meet the actual demand. The Association states that the spirit-production of members for the coming season is expected to fall considerably below production in the past years, and an average general output for the year can only be secured if increased facilities for production are offered in the case of the other distilleries. The memorial concludes by stating that should the request fail to meet with consideration, not only will the supply of the German market with refined and other spirit be seriously affected, but injury will be done to German industries dependent on the supply of spirit.

Salvarsan Treatment.—Professor Ehrlich on September 27 addressed the medical section of the Congress of German men of science on the progress which has been made in the salvarsan treatment during the last twelve months. Professor Ehrlich dealt first with the question of the injurious effects of salvarsan, and said there are a number of symptoms, such as fever, headache, vomiting, and diarrhoea, which had appeared to arise directly from the remedy itself and which he regarded as unavoidable. Experience, however, had shown that there is strong ground to believe that these symptoms arose from some defect in the solvent used, and that where absolutely fresh distilled water is employed they can be almost altogether avoided. The explanation he offered was that under the influence of dead bacteria in the solvent the cells of the body displayed an increased sensibility to arsenic. This reaction would be unfavourable to the process of sterilisation, in addition to the fact that the febrile symptoms would in the case of diseased persons tend to produce serious disturbances in important organs. With regard to the disturbances in the nervous system which had so frequently been observed, the functional disturbance was probably due to the fact that the destruction of the spirochetes is followed by local swelling which, when external, is comparatively harmless, but when it takes place in the bones and tissues would exercise an injurious pressure on the nerves. The second and more serious type of cases was at first regarded as the direct result of arsenic-poisoning, but Dr. Benairo, who has observed 194 cases treated with salvarsan and compared them with 122 cases treated with mercury, found that among the latter such disturbances—of the auditory nerves, for instance—occur as frequently as among the former. From this Professor Ehrlich concluded that the disturbances arise exclusively from the development of isolated spirochetes which have resisted the remedy, and not from the effects of arsenic. The number of cases where salvarsan treatment has been followed by death is relatively small in comparison with the number treated, and these cases are almost exclusively those of persons in such an advanced stage of disease that the salvarsan treatment had been adopted only as a last resource. In consideration of the fact that several hundred thousand cases had been treated during the last twelve months, the number of unfortunate results is so small as to leave no longer any serious grounds for misgiving. To sum up, it could be asserted that the experiences of the last twelve months have led to the recognition of salvarsan as a relatively harmless remedy, and to the conclusion that acute reactions are to be ascribed only to faulty technique. As a remedy for diseases other than syphilis salvarsan has proved its efficacy in a remarkable manner. Sufferers from intermittent fever in Russia, Spain, and the Congo have been permanently cured by a single injection. As a cure for frambesia its results have been astonishing. Of 900 patients treated in Surinam only three have suffered a relapse, and equally remarkable results have been achieved in the case of tertian ague, of the Aleppo boil, and of bilharzia.

GAZETTE.

Partnerships Dissolved.

HERBERTSON, DR. RICHARD G., and RICHARDS, DR. BERKELEY KENNETH, the Dispensary, Inverrafter, New Cumnock.
MARTLAND, E. W., and GOWLAND, W. P., Clegg Street, Oldham, surgeons and general medical practitioners, under the style of Martland & Gowland.

The Bankruptcy Acts, 1883 and 1890.

RECEIVING ORDER.

YOUNG, WILLIAM, whose place of residence the petitioning creditors are unable to ascertain, oil importer and broker.

DEED OF ARRANGEMENT.

Sindall, John William (Deceased, by, etc.), late Wood Hill, Northampton, formerly Knaresborough. Chemist and Druggist. Trustee: Mr. Geo. W. Beattie, Northampton. Dated, September 25; filed, September 30. Secured creditors, 177*l.*; liabilities unsecured, 1,106*l.*; estimated net assets, 92*l.* The creditors include: The British Drug Houses, Ltd. (24*l.*); Baiss Bros. & Stevenson, Ltd. (10*l.*); J. Bell, Hills & Lucas, Ltd. (16*l.*); S. Maw, Son & Sons (26*l.*); R. J. Reuter (12*l.*); Wright, Layman & Umney, Ltd. (19*l.*); Southall Bros. & Barclay, Ltd., Birmingham (12*l.*); J. Richardson & Co., Ltd., Leicester (11*l.*).

LIMITED COMPANIES.

New Companies Registered.

The letters P.C. mean Private Company within the meaning of the Companies Act, 1907, and R.O., Registered Office.

ST. ALBANS MINERAL WATER CO., LTD. (P.C.).—Capital 1,000*l.*, in 1*l.* shares. Objects: To carry on the business indicated by the title. The first directors are G. D. Haynes and H. S. Gibbs. R.O., Dagnall Street, St. Albans.

SNOWDON & CO., LTD. (P.C.).—Capital 8,250*l.*, in 1*l.* shares. Objects: To carry on the business of chemists, chemical manufacturers, workers of a process or invention for flame-proofing wood and textile fabrics, etc., and to adopt an agreement with E. J. E. Tyler, E. J. Walker, F. Seaton-Snowdon, and E. Notlingk, who are the first directors. R.O., 10 Bush Lane, E.C.

OZO MEDICATED AIR CO., LTD. (P.C.).—Capital 3,000*l.*, in 1*l.* shares. Objects: To carry on the business of manufacturers of and dealers in anatomical, ophthalmic and surgical appliances of all kinds, chemists, druggists, etc. The first directors are W. H. Cadman, W. T. Mills, and H. L. Brown. Qualification, 50*l.* R.O., 8 High Holborn, W.C.

IRISH CHEMICAL CO., LTD. (P.C.).—Registered in Dublin. Capital 500*l.*, in 1*l.* shares. Objects: To carry on the business of chemists, druggists, manufacturers and dealers in and importers of pharmaceutical, medicinal, chemical, and other preparations and articles. The first directors are W. J. A. Fox, A. S. Armstrong, and C. Mannin. R.O., 6 Market Lane, Dublin.

Company News.

PURE CHEMICAL AND SPICE CO., LTD.—Report of liquidator (Mr. P. W. Ardran) at meeting to be held at 41 Castle Street, Liverpool, on October 30, at 11 A.M.

RIDGE'S INSECTIFUGA, LTD.—Report of liquidator (Mr. O. Berry) at meeting to be held at 151 and 152 North Street, Brighton, on November 3, at 2.30 P.M.

DIAMOND SODA-WATER MACHINE CO., LTD.—Report of liquidator (Mr. C. L. Nichols) at meeting to be held at 1 Queen Victoria Street, London, E.C., on November 6, at 3 P.M.

OIL OF WINTERGREEN dropped on adhesive plaster penetrates and makes it possible to remove the plaster even from hairy surfaces without pain, it is said.

"DISEASES AND REMEDIES."—The fourth edition of this useful book for chemists has recently been published by the C. & D. It is a concise survey of the most modern methods of medicine, telling the nature of ailments and describing the methods of treatment. The fourth edition has been carefully revised by a general medical practitioner, and certain parts of the book have been entirely rewritten. It is published at 3*s.* (by post 3*s.* 3*d.*), and can be obtained from the C. & D. offices in London or Australia and from the wholesale and sundries houses.

BIRTHS.

BREEN.—At The Parkgate Pharmacy, Dublin, on September 26, the wife of E. J. Breen, Ph.C., of a son.

RAMSAY.—At 1A Inverary Terrace, Dundee, on September 30, the wife of W. A. Ramsay, chemist and druggist, of twins (son and daughter).

MARRIAGES.

BOSWELL—CULLWICK.—At Trinity Wesleyan Methodist Church, Wolverhampton, by the Rev. A. H. Bestall, on October 4, Robert Vallance Boswell, fifth son of Mr. and Mrs. James Boswell, Jasper House, Wolverhampton, to Ethel, eldest daughter of Mr. and Mrs. Herbert E. Cullwick, of Belvedere, Wolverhampton.

PAIN—BISHOP.—At Holy Trinity Church, Folkestone, on September 30, William Pain, son of Mr. William Pain, formerly of Warwick Lane, London, E.C., to Nora Frances Bishop, daughter of Mr. E. J. Bishop, chemist and druggist, Mayor of Folkestone.

PHILLIPS—OVERTON.—At St. Stephen's Church, Bush Hill Park, by the Rev. Edward Forbes, on September 27, Henry Marcus Phillips, chemist and druggist, Tenby, to Mabel, eldest daughter of Mr. F. W. Overton, "Savernake," Bush Hill Park.

PLATT—ZAMBRA.—At St. John the Baptist Church, Woking, Surrey, on September 30, by the Rev. C. Knight and the Rev. T. W. Graham, Horace Frederick, fourth son of the late Mr. Thomas Platt (Clarke, Son & Platt, Ltd.) and of Mrs. Platt, of Kensington House, Kensington Court, W., to Edith Mary, daughter of Mr. Marcus Warren Zambra, of Hart Hill, St. John's, Woking.

DEATHS.

BENNETT.—At 20 Abercrombie Street, Chesterfield, recently, Mr. George Bennett, pharmaceutical chemist, for many years in business at the corner of Skeldergate, York. Mr. Bennett passed the Major in 1865.

DAVIES.—On September 20, Mr. John Richards Davies, for some years manager for Mr. G. Barker, chemist and druggist, Thames Street, Sunbury, aged sixty-four.

EVANS.—At Bank House, Llandilo, on September 30, Mr. Lemuel David Evans, for many years dispenser for Dr. W. A. T. Lloyd, of Llandilo.

GAMER.—On September 16, Mr. Edward James Francis Gamer, chemist and druggist, 596 Attercliffe Road, Sheffield, aged fifty-four.

HASTINGS.—At the Medical Hall, Newcastle, co. Down, on September 25, Jessie Glenn, infant daughter of Robert Hastings, registered druggist.

LAIRD.—At 68 Grange Loan, Edinburgh, on September 29, Mr. James Craigie Laird, of G. H. Laird & Son, chemists, 40 Queensferry Street. Mr. Laird died suddenly. He was to have undergone an operation for an abscess in his leg, and chloroform was about to be administered when he expired. Mr. Laird carried on the chemist's business so long conducted by his father, the late Mr. G. H. Laird, at 40 Queensferry Street. He passed the Minor examination in 1896 and the Major examination two years later. Before his father's death in 1907 he became a partner with him. The funeral took place on Sunday at Morningside Cemetery, which was attended by a large number of local pharmacists.

MEE.—On September 22, Mrs. Annie Mee, chemist and druggist, 7 Bridge Street, Earlestown, Lancashire, aged 83. Mrs. Mee was registered under the name of Annie Taylor as a chemist and druggist prior to 1868.

PINCH.—At Bristol, recently, Mr. James Emanuel Pinch, chemist and druggist, 14 Sefton Park Road, Bristol, who was in business for many years at 5 Cheap Street, Bath.

REDWOOD.—On September 28, of pneumonia, Bernard

Boverton, only son of Sir Boverton Redwood, Bart., F.I.C., F.C.S., F.R.S.E., Wadham Lodge, Wadham Gardens, Hampstead.

SADLER.—At Southlands, Eaglescliffe, on September 29, Colonel Sir Samuel Alexander Sadler, F.C.S., of Middlesbrough, aged sixty-nine. Sir Samuel Sadler was the head of the business of Sadler & Co., Ltd., Cleveland Chemical Works, Middlesbrough. He was a son of the late Mr. James Sadler, of Langley Hall, near Birmingham, and was educated privately and at University College, London. He became a Fellow of the Chemical Society in 1868, and having taken out a number of patents for the production of aniline dyes and effected various improvements in the processes of coke manufacture, he settled in Middlesbrough as a manufacturing chemist. The business grew steadily, especially in the production of mineral acids and other heavy chemicals required in the neighbouring



COLONEL SIR S. A. SADLER.

industries. It was ultimately formed into a limited company, which last year showed profits of over 32,000%. Sir Samuel took a very active part in public affairs, having been a member of the Middlesbrough Town Council for nearly forty years, and was three times Mayor of the borough; he was elected for the third time last November, but he was compelled to resign a short time ago owing to his failing health. He stood as Conservative candidate in Middlesbrough for parliamentary honours in 1878, 1880, and 1895, and was elected on the fourth occasion (1900), remaining in Parliament until the General Election in 1906. While in Parliament Sir Samuel, along with Sir Albert Rolit, helped to give practical effect to the agitation which Mr. Thomas Tyrer had carried on for some years in regard to duty-free alcohol for industrial purposes. On July 20, 1904, he moved an amendment to the Finance Bill providing for duty-free and suitably denatured alcohol required for motive-power, lighting, heating, and manufacturing purposes. The Chancellor of the Exchequer (Mr. Austin Chamberlain) promised a committee on the subject, and the amendment was withdrawn; but it was taken up on July 24 by Mr. Charles Hobhouse, and an important debate followed, in the course of which Mr. Chamberlain, Mr. Haldane, Colonel Sadler, Sir William Holland, and others took part. The Colonel accepted the Chancellor's promise of a committee, urging that Mr. Tyrer should be appointed a member of it, which was done. When the work of the committee was completed and "industrial alcohol" became a reality, Colonel Sadler was one of those who attended the Trocadero banquet to Mr. Tyrer on May 25, 1905, and responded for the Houses of Parliament. He said then that he had contested five elections during twenty-five years before he became a member of Parliament, and his friends had told him that he deserved the five years' hard labour he had since had in the House. At the 1906 election Mr. Havelock Wilson succeeded him in the representation of the borough. Mr. Sadler received his knighthood in July 1905, on the occasion of the official celebration of King Edward's birthday. He had been connected with the Volunteer movement as an officer of the 1st Volunteer Battalion of the Durham Light Infantry for many years, and was made Lieutenant-Colonel in 1876 and Honorary Colonel in 1896. He held the Victoria Decoration and the D.S.O. Sir Samuel Sadler was a genuine man, an excellent judge of men, very straightforward, and exceedingly popular in his district, and had his politics been of a different complexion he would no doubt have had a much earlier and much longer tenure in Parliament; but his election in 1900 was the only occasion on which Middlesbrough has returned a Conservative to Parliament.

TRADE NOTES.

REGULIN.—The Board of Customs and Excise have authorised the Regulon Syndicate, Ltd., 13 Cullum Street, London, E.C., to supply "Regulin" unstamped to retail chemists for dispensing purposes only.

"ALLENBURY'S" PRICES.—Messrs. Allen & Hanburys, Ltd., Bethnal Green, London, E., intimate that on October 2 the prices of Nos. 1 and 2 milk foods and the "Allenbury's" Diet were increased to 1s. 6d. and 3s. retail (minimum), and 16s. and 32s. per doz. wholesale. Their jujubes and pastilles have also been revised in price, the rates now being 2 oz. 5d. minimum retail, 4 oz. 10d., 8 oz. 1s. 7d., and 1 lb. 3s., the wholesale prices being 4s., 8s., 12s. 6d., and 24s. per doz. The Throat Pastilles are 10d. minimum retail for 3 oz., 1s. 10d. for 8 oz., and 3s. 6d. per lb., and wholesale 8s., 14s. 6d., and 28s. per doz., subject to the wholesale discounts.

KNOLL'S FINE CHEMICALS.—Messrs. Knoll & Co., of Ludwigshafen-on-Rhine, celebrated their semi-jubilee on October 1, the firm having been established by Dr. Albert Knoll in 1886. Dr. Knoll at first devoted himself to the manufacture of fine chemicals, especially the opium alkaloids. By a special method of manufacture he succeeded in making codeine on a large scale, thus bringing to an end the previous prohibitive prices. At the suggestion of Professor Gram, of Copenhagen, working in conjunction with Professor Schroder, of Heidelberg, the heart-tonic diuretin was introduced in 1890, and the other well-known remedies, such as tannalbin, styptol, and bromural, followed.

"POISONOUS" POISON-BOTTLE.—This is the name of a poison-bottle of new design which is shortly to be placed on the market by the makers of the "Practical" poison-bottle. The bottle is of flat shape, and is studded with spikes on the sides and part of the back panel. The front is left free for the label, and on the back moulded in the glass are the words "Poisonous. Not to be taken." The bottle has no lip, but is ground flat, and in the neck are depressions which have for their object the tighter gripping of the cork or rubber stopper. The bottle, which is made in blue glass, thus embodies several novel features; but the point upon which the manufacturers pride themselves is that the bottle can be sold by the wholesale house (from whom it will be obtainable in a fortnight) at a cheaper rate than any poison-bottle. This fact is of special interest to chemists, whose experience in the supply of poison-bottles for domestic poisons will have shown that however willing the public are to be protected from accidental poisoning by the employment of distinctive bottles, they have not yet appreciated fully the fact that these bottles need paying for.

SEA-WATER INJECTIONS.—The Pharmacie Centrale de France, Paris, whose London agent is Mr. Astor Boisselier, 13 and 14 Trinity Square, E.C., have for some time specialised in the preparation of isotonic sea-water for use as an injection by the Quinton method. Visitors to Sables-d'Olonne, on the Vendée coast of France, will be acquainted with the Laboratoire Maritime at that pleasant seaside resort, where the serum is prepared. The sea-water is collected, under the supervision of a pharmacist, off Sables-d'Olonne, at a depth of 10 metres, in sterile vessels. At the laboratory it is adjusted to isotonic strength by adding the requisite amount of sterile water, passed through a Chamberland filter, and then placed under rigorous aseptic conditions in ampoules of various sizes. The dose of the sea-water serum for newly born infants is 10 to 30 c.c. subcutaneously every two days; for infants of from six months to one year the quantity to be employed is 30 to 50 c.c. Adults require an injection of 50 c.c. every three or four days, and if well borne the amount can be increased to 100 or 200 c.c. Mr. Boisselier supplies the serum in ampoules of a capacity of from 5 to 500 c.c.

CHEMISTS' CALENDARS.—From Messrs. Ford, Shapland & Co., 6 Great Turnstile, Holborn, London, W.C., we have received a selection of calendars and almanacks for 1912. These comprise the following varieties:

Pocket Almanack, $3\frac{1}{4}$ in. by $2\frac{1}{4}$ in. Pp. 32.
 Card Calendar. $2\frac{3}{4}$ in. by 2 in.
 Hanging Picture Calendar. $7\frac{1}{4}$ in. by $4\frac{1}{4}$ in.
 Illustrated Almanack. $7\frac{1}{2}$ in. by 5 in. Pp. 36.
 Blotter Calendar. $4\frac{1}{2}$ in. by $9\frac{1}{2}$ in. oblong.
 Book-mark Calendar. $7\frac{1}{4}$ in. by $1\frac{3}{4}$ in. upright.

The Illustrated Almanack is illustrated by engravings, and the information of a useful kind which it contains includes the latest Census returns. The pocket calendars have very pretty covers in half-tone or gold and colours. The card calendar is on brown card with a picture in colours. The card calendars are folded, and, like the pocket calendars, are much valued by customers for carrying on the person. Messrs. Ford, Shapland & Co. will send samples and particulars of all these calendars to any of our readers who desire to take advantage of this popular form of business advertisement.

BUSINESS CHANGES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

MR. T. ROGERS, St. Clears, is opening a branch pharmacy at Briton Ferry, Glam.

It is rumoured that another pharmacy is to be opened in the Wallasey district of Liverpool.

MR. TOM BROOKS is removing shortly from 87 Turnpike Lane, Hornsey, to Beverley, East Barnet, Herts.

MR. STANLEY F. WARD has commenced business as a drug and produce merchant at 9 Mincing Lane, London, E.C.

MR. J. P. SHOLL, chemist and druggist, has purchased the business of Mr. H. W. Kilby, Vicarage Road, Watford.

MR. W. JONES, chemist and druggist, has taken over from Mr. H. Davies the Aeron Pharmacy, 2 Bridge Street, Aberayron.

MESSRS. ARTHUR MASON & Co., drug merchants, have removed from 1 Sheppy Place, Minories, London, E., to 62 and 63 Minories, E.

MR. J. C. BERRY, chemist, late of Paisley, has purchased the business of Mr. A. F. Lawrence, chemist, 98 Craven Park Road, Harlesden, London, N.W.

MR. W. FORD, chemist and druggist, 50 King Street, Maidstone, has opened a dental establishment at 39 Bank Street, Ashford, Kent.

MR. HOWELL MORGAN, chemist and druggist, Medical Hall, opposite the Market, Cardigan, has purchased the business of the late Mr. J. E. Jones, chemist, High Street, Cardigan.

MESSRS. FRENCH & PLUCKNETT, 7 Mincing Lane, London, E.C., in announcing the death of their late Mr. Bates, intimate that the business of the firm will be carried on under the same name and style as heretofore by the remaining partners.

BOOTS, LTD., are opening a branch in Gold Street, Tiverton. The new shop in the City of London at the south side of Cheapside, near the corner of St. Paul's Churchyard, has been opened, and the extension of their Moorgate Street shop to Moorfields is complete.

MR. F. W. HOYLE, chemist and druggist, has resigned the management of the drug department of the Leeds Industrial Co-operative Society, Ltd., which he has held for nine years, and has purchased the old-established business of Mr. Geo. Coulter, chemist and druggist, Market Place, Wetherby, Yorks.

PRONUNCIATION OF DRUG-NAMES.—The word hæmatoxylon is commonly pronounced with the accent on the "ox." This is incorrect, as the word is derived from *αἷμα αἰματος*, blood, and *ξύλον*, wood, and the principal accent should be on the "xy" thus—hæ'matoxy/lon. For a similar reason podophyllin should have the accent on the "phyll," and ought not to be called podophyllin. Again, it is very common to hear tragacanth pronounced with a soft "g." The letter *g* is never soft in front of *a*; the word should be pronounced with a hard *g*, as if it were *traggacanth*, and not *trajacanth*.—*The Prescriber*.

Contracts.

THE following tenders have been accepted by the under-mentioned local bodies:

Aberystwyth Guardians.—Mr. E. P. Wynne, chemist, Aberystwyth, for the supply of disinfectants.

Alresford (Hants) Guardians.—Trimming & Co., Ltd., Alton, for lint at 2s. per lb.; boric lint, 2s. lb.; castor oil, 1s. 6d. pint; fuller's earth, $4\frac{1}{2}$ d. tin; Allenbury's feeders, 1s. 2d. each, valves 3d. each, and teats 4d. each; cotton-wool, 1s. 6d. lb.; cellulose, 1s. lb.; carbolic vaseline, 1s. per tube; Condys fluid, 2s. pint; cod-liver oil, 1s. 9d. pint; best jaconet, 5s. yard; second jaconet, 2s. 6d. yard; carbolic oil, 1s. 7d. and 1s. 9d. pint; lime-water, 3d. pint; glycerin, 2d. oz.; sweet oil, 1s. 6d. pint; Higginson's syringes, 3s. 6d. each; linseed-meal, 4d. lb.; nipple-shields, 6d. each; clinical thermometers, 1s. 9d. each; glass syringes, 6d. each; methylated spirit, 6d. pint.

Barrow-in-Furness Guardians.—Mr. R. C. Keay, chemist, for the supply of drugs, etc.

Bath Guardians.—Corbyn, Stacey & Co., for drugs. Bright & Pryke, Bath, appointed chemists for six months.

Belper Guardians.—Calvert & Son, chemists, Belper, for the drug supply.

Blackburn Guardians.—C. A. Critchley & Co., chemists, for the supply of drysalts' sundries to the Blackburn Cottage Homes during the ensuing half-year.

Brentford Guardians.—Middleton Bros., for disinfectants.

Bury St. Edmunds Guardians.—Mr. O. A. Clark, chemist, Bury, for drugs.

Camberwell Guardians.—W. S. Rothband & Co., for the supply of waterproof-sheeting at 4s. 6d. per yard.

Cannock Guardians.—Haywards, Cannock, for Jeyes' fluid at 39s. per gal., and cod-liver oil at 3s. 6d. per gal. Mr. T. W. Garland, chemist, Cannock, for feeding-bottles at 5s. 6d. per dozen; tow, $4\frac{1}{2}$ d. per lb.; Sanitas, 10d. per bot.; grey wool, 1s. $7\frac{1}{2}$ d. per dozen sheets; borax (crys.), 2d. per lb. Mr. E. A. Fereday, chemist, Cannock, for clinical thermometers, 1s. 6d. each; cotton-wool, $7\frac{1}{2}$ d. per lb.; lint, 1s. $3\frac{1}{2}$ d. per lb.; linseed-meal, 3d. per lb.; brimstone, 1d. per lb.; castor oil, 3s. 6d. per gal.; turpentine, 4s. per gal.; methylated spirits, 2s. 8d. per gal.; and paraffin oil, 5d. per gal.

Canterbury Guardians.—E. Bing & Son, chemists, Canterbury, for surgical dressings at 43d. 8s.

Chepstow Guardians.—The tender of the local Co-operative Society has been accepted for the supply of bovril to the workhouse.

Chester Guardians.—Mr. J. W. Huke, chemist, Chester, for drugs at 39d. 19s. 11d.

Chipping Sodbury Rural District Council.—Jones & Co., drugs for the hospital.

City of London Guardians.—Bovril, Ltd., for the supply of 56 lb. of invalid bovril at 12d. 12s.

Coventry Guardians.—Mr. F. Bird, Coventry, appointed chemist and druggist. Wyleys, Ltd., Coventry, for the supply of drugs.

Darlington Guardians.—Parkin, Ness & Co., Darlington, for disinfectants; Mr. W. F. Burdekin, chemist, Darlington, for drugs.

Dartford Rural District Council.—Allen, Harding & Co., for sodium manganate at 21d. 5s. per ton; Union Alkali Co., Ltd., for chloride of lime at 6d. 7s. 6d. per ton.

Droxford (Hants) Guardians.—W. Bates & Co., Ltd., Southampton, for bandages, 1 in. and 2 in., at 9d. and 1s. 1d. per dozen; camphorated oil, 1s. 2d. pint; castor oil, 8d. pint; Condys fluid, 10d. bottle; cotton-wool, 10d. lb.; boric lint, 1s. lb.; white lint, 1s. 3d. lb.; methylated spirits, 2s. 6d. gal.; plaster-reels (10 yards), 1 in. 21s. doz., 2 in. 32s. doz. Sanitas Co., Ltd., for Sanitas at 3s. 6d. per gal.

Fakenham Rural District Council.—Mr. J. C. Holton, chemist, Fakenham, disinfectants.

Gloucester Guardians.—Mr. W. Walwin, chemist, Gloucester, for drugs.

Grantham Guardians.—B. & J. V. Fillingham, chemists, Grantham, for the supply of drugs, etc.

Hemsworth (Yorks) Guardians.—Mr. G. Hodgson, chemist, Hemsworth, for the supply of drugs.

Isle of Thanet Guardians.—Olby, Ltd., Ramsgate, for disinfectants at 3s. 6d. per gal. Drugs for outdoor poor: Mr. V. Woolls, Cecil Square, Margate, 15d. 9s. 2d.; Mr. D. T. Evans, Harbour Street, Ramsgate, 26d. 19s. 11d.; Mr. A. H. Simmon, of High Street, St. Lawrence, Ramsgate, 16d. 17s. 4d.; Mr. W. J. Ward, 1 High Street, St. Peter's, Broadstairs, 17d. 4s. 7d.

Lambeth Guardians.—Baiss Bros. & Stevenson, Ltd., for drugs; S. Maw, Son & Sons, for druggists' sundries. At the meeting of the Guardians on October 4 it was reported by the Contracts Committee that a small committee had been appointed to consult with the several medical officers concerned as to the desirability of providing a central store for

drugs and druggists' sundries, and to obtain reports from them on the proposal. The Chairman said the committee might well consider the advisability of providing for a systematic analysis of drugs. He had been in communication with the chief dispenser of a large institution where a considerable sum was spent on the analysis of drugs with beneficial effect. After discussion the matter was referred to the Contracts Committee for consideration.

Mile End Guardians.—Hodgkinson, Prestons & King, for the drug supply at 55*l.* 18*s.* 8*d.*; and the Hospital and General Contracts Co. for druggists' sundries at 45*l.* 7*s.* 1*d.*

Orsett Guardians.—Mr. J. C. Mitchell, Ph.C., for drugs at 62*l.* 16*s.* 2*d.* (less 10 per cent.).

Pembroke Guardians.—Mr. D. Davies, chemist, Pembroke, for the half-yearly chemical supplies.

Poplar Guardians.—E. Cook & Co., Ltd., and T. D. Rowe, for soft soap, carbolic and fancy soaps.

Reigate Guardians.—Mr. John Markham, chemist, Reigate, for drugs and surgical appliances.

Romsey Guardians.—Mr. F. Oram, Ph.C., Romsey, for drugs and surgical dressings.

St. Albans Guardians.—Corbyn, Stacey & Co., Ltd., for drugs, etc.

St. Marylebone Guardians.—Corbyn, Stacey & Co., Ltd., for drugs at 294*l.* 12*s.* 2*d.*; S. Maw, Son & Sons, for druggists' sundries at 261*l.* 10*s.* 2*d.*; Pocock Bros. for waterproof-pillows at 6*l.* 3*s.* 6*d.*; Victoria Rubber Co., Edinburgh, for waterproof-sheeting at 68*l.* 5*s.*

South Stoneham Guardians.—W. Bates & Co., Ltd., Southampton, for medical requisites.

Southampton Guardians.—W. Bates & Co., Ltd., Southampton, for drugs and chemicals.

Swindon and Highworth Guardians.—J. Green & Co., chemists, Swindon, for medicines and surgical requisites.

Tonbridge Guardians.—Cave, Edwards & Co., Tunbridge Wells, for disinfectants.

Watford Guardians.—Mr. J. B. Sholl, for a supply of surgical dressings.

Wirral Guardians.—Mr. J. G. Lee, chemist, Neston, for the supply of drugs.

Wolstanton and Burslem Guardians.—Sanitas Co., Ltd., for disinfectants.

Workop Guardians.—Mr. T. E. Pask, chemist, Workop, for drugs.

FAIR-WAGES CLAUSE.—The Local Government Board of England and Wales has issued a circular-letter to local authorities embodying the resolution passed by the House of Commons on the subject of fair-wage clauses in contracts, and the recommendations made by the Advisory Committee of representatives of Government Departments, which has been established. The letter points out that the Advisory Committee recommends that clauses such as those inserted in Government contracts should also be introduced into contracts which are not entered into by Government Departments, but which involve the expenditure of public money, or other consideration granted by a Government Department, or which require the approval of the Department. It appeared to the Board that the policy adopted in the case of Government contracts should be followed in the cases of all contracts for the execution of works, or the supply of materials, which are entered into by local authorities, or by or on behalf of any committee wholly or in part appointed by a local authority. While they were aware that many local authorities specify in their contracts conditions to be observed by the contractor as to rates of wages and other matters affecting persons employed by him, the Board thought that in every case the authority should give the matter careful consideration, with the view to the introduction in all contracts of clauses on the lines of those inserted in Government contracts.

PERSONALITIES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

MR. HENRY D. KELF, Bromley, Kent, has been elected a member of the Bromley Education Committee.

MR. E. BONTCHEFF, of Messrs. Bontcheff & Kidoff, Kezanlik, is now in London, the offices of Messrs. Fredk. Boehm, Ltd., Jewry Street, E.C., being his headquarters.

MR. R. W. WREN, who has passed the Minor examination in London this month, is the son of Mr. R. C. Wren, one of the directors of Messrs. Potter & Clarke, Ltd., and he is taking up a position in the business.

ALDERMAN J. BIRKETT, chemist and druggist, Mayor of Morecambe, has offered to present to the Corporation a brass tablet, to be placed in the Guildhall, upon which will be recorded the names of mayors of the borough.

MR. HERBERT RONALD CULLWICK, son of Mr. Herbert E. Cullwick, chemist and druggist, wholesale dental manufacturer, Wolverhampton, was successful at the Preliminary Science examination for the diploma in Dental Surgery, recently held in London.

MR. J. NOBLE, chemist and druggist, Wallington, and Mr. J. R. Comyns, chemist and druggist, Carshalton, have been appointed members of the committee of the newly formed Tradesmen's Association for Wallington, Carshalton, and Beddington.

MR. AUBREY T. HILL, Ph.C., formerly manager of Messrs. Burroughs Wellcome & Co.'s factory at Dartford and of Messrs. Sharp & Dohme's laboratories at Baltimore, U.S.A., is now works manager to Messrs. Day & Martin, Ltd., Borough, London, S.E.

In our obituary notice of Mr. George Jackson, of Messrs. George Jackson & Sons, Ltd., 870 Rochdale Road, Manchester, it was incorrectly reported that he once found himself committed for trial on a charge of manslaughter in connection with a case in which Jackson's Febrifuge was used. This mistake appears to have arisen from a remark made by the Coroner at the inquest, when he said that if Mr. Jackson ever came before him again he would commit him for manslaughter. Whereupon Mr. Jackson replied: "I wish you would do so. I should get justice then—I never get any before you."

WILLS PROVEN.

MR. DAVID GAMLEY, 11 Gladstone Terrace, Edinburgh, chemist and druggist, who died on May 26, left personal estate in the United Kingdom valued at 3,994*l.*

MR. JOHN BROWN, 25 Byker Terrace, Walker, Newcastle-on-Tyne, chemist and druggist, who died on August 26, left estate valued at 3,425*l.* 11*s.* 11*d.* gross, with net personality 3,014*l.* 4*s.*

MR. RICHARD HODGSON BROCKETT, Winston House, Benton, retired chemist, who died on May 24, aged seventy-seven, left estate of the gross value of 6,081*l.* 0*s.* 10*d.*, of which the net personality has been sworn at 1,919*l.* 4*s.* 3*d.*

MR. RICHARD WALKER SILSON, 113 Church Street, Munningham, Bradford, chemist and druggist, who died on July 4, aged sixty-four, left estate valued at 852*l.* 15*s.* 2*d.* gross, with net personality 373*l.* 5*s.* 6*d.* Probate of his will has been granted to his son, Mr. Richard Townsend Silson.

MR. WILLIAM ROBERTS, 37 and 38 Merchant Street, Pont-lottyn, Glamorgan, chemist and druggist, who died on July 26 intestate and a bachelor without parent, left estate of the gross value of 3,952*l.* 9*s.* 6*d.*, of which the net personality has been sworn at 3,852*l.* 11*s.* Letters of administration have been granted to his brother Mr. Samuel Roberts, 51 Brithwennydd Road, Trealaw.

MR. ROBERT FERDINAND GRAESSER, Argoed Hall, Llangollen, chemical manufacturer, who died on July 15, left estate of the gross value of 108,634*l.* 13*s.* 9*d.*, with net personality 95,783*l.* 13*s.* 5*d.* Probate of his will has been granted to his son Mr. Norman Hugo Graesser, Argoed, Mr. Edw. Lloyd Edwards, of Bryn Ocrog, Llangollen, and Mr. Charles Watkin Richards, The Bungalow, Llangollen. The testator left 500*l.* to his wife, Mrs. Mary Elizabeth Graesser, and he left his household and personal effects upon trust for her benefit for life, with remainder upon trust for his son, Norman Hugo, with other remainders; he nominated his son Ernest Hermann to succeed him as governing director of the Wrexham Lager Beer Co., Ltd., and stated that he considered his remuneration should be 150*l.* per annum; the goodwill of his chemical works at Cefu he left to his son Norman Hugo Graesser, and he left his freehold and leasehold estates in Llangollen to his wife for life, with remainder to his son Norman Hugo. Mr. Graesser left 10*l.* to each of his servants and workmen at his chemical works of five years' service, and 25*l.* to each of his said servants and workmen of upwards of ten years' service. He left 2,000*l.* per annum to his wife during her life, and during that period he left the remainder of the income of his residuary estate to all of his children in equal shares. On the death of his wife he left his 1*l.* shares in the Wrexham Lager Beer Co., Ltd., to his children.

Medical Exhibition.

THE seventh London Medical Exhibition, which is being held this week by the "British and Colonial Druggist" at the Royal Horticultural Hall, Westminster, London, S.W., is equal to any of its predecessors in the number of exhibits, but suffers from a paucity of novelties. Our survey of the exhibition given below is confined to displays of special pharmaceutical interest and of new products.

THE PHARMACEUTICAL HOUSES

with general displays are few in number. CORBYN, STACEY & Co., LTD., in their exhibit of galenicals and other special preparations, give prominence to anthabroma (food), lecithin preparations, galactoside (calcium lactate and iron phosphate emulsion), and oleum iodi attingitivum. Organo-therapeutical preparations of British manufacture vie for attention with special pharmaceutical products and anaesthetics at the stall occupied by DUNCAN, FLOCKHART & Co. We were told here that the use of ethyl chloride as an anaesthetic is still increasing, and is now almost solely used in minor operations. This firm's new preparations include cuprosal, a ringworm-ointment, and haemamol, a pile-remedy. C. J. HEVLETT & SON, LTD., are showing a selection of their original preparations, including physiotincts and somnigen. Their new designs of sprays, vaporisers, and inhalers are also on view. JAS. WOOLLEY, SONS & Co., LTD., give first attention to their palatable egg-emulsion, jecoval, and to valkasa, a nerve-food containing milk casein with glycerophosphates. Woolley's foods and ergoval (ergot extract) are also among the many preparations represented. The features of the "Woolley" antiseptic spray is convenience and easy sterilisation. OPPENHEIMER, SON & Co., LTD., have a varied exhibit, including palatinoids and pulverettes. The sea-water plasma now in vogue is to the front here, as also ozoline, a new antiseptic cream, and ung. zoleas for dry eczema. The elegant double stand of BURROUGHS WELLCOME & Co. contains an extensive range of the fine chemicals and compact medical cases and outfits. Epinene, the synthetic pressor principle, and concentrated diphtheria-serum are coming in for much medical attention, the latter being even more economical than high-potency serum. The "Wellcome" way of thoroughness and neatness even in small details is illustrated by the new net-covering for "vaporole" aromatic ammonia. The many digestive and nutritive products exhibited by FAIRCHILD BROS. & FOSTER include several new preparations. Hormonadin is a pancreatic extract differing from holadin in freedom from trypsin, amyllopsin, and lipase. Oxynitin is dry hydrochloric acid albumen, containing 5 per cent. of the acid; while enemose is concentrated nutrient designed for colonic administration. Brain-lecithin is the main constituent of "pepule" lecibrin. The firm's Glycerinum Pepsinae is a leading seller at present in virtue of the facts that it more than satisfies B.P. requirements, and is cheap. The peptonised products of SAVORY & MOORE, LTD., are still prime favourites with the medical profession, judging from the demand for samples. This firm's fructolax is a laxative lubricant hydrocarbon jelly.

Pneumococcus and vaccine therapy is the seasonal serum therapy enlarged upon at PARKE, DAVIS & Co.'s imposing stands. Another new treatment for pyorrhœa and quinsy is parodontal streptococcus vaccine. An addition to the adrenalin series is adrenalin throat-lozenges; while a set of six tubes for various purposes is now available for use with the "glaseptic" nebuliser. JOHN BELL & CROYDEN, LTD., illustrate with a model the sterilisation of surgical dressings. This stand is also shared by the HYGIENIC SYPHON Co., LTD. (siphons), and WESTON & WESTALL, LTD. (Droitwich brine crystals). Several drug-firms limit their display to one or but a few

SPECIALITIES.

Thus, the BRITISH DRUG HOUSES LTD. keep everything in the background in order that "sempules," the new advantageous form of suppository devised by Dr. Hadyn Brown, should have the field practically to itself. Various

medicinal combinations are displayed in transparent-topped boxes. Boyd's banana-food, Esvach water, and Eau de Menthe de Dalmahoy fill in the background of the stand. WRIGHT, LAYMAN & UMNEY, LTD., show only their coal-tar specialities, including recent additions, such as dog-soap (sapo carbonis caninibus), shampoo-powders, and coal-tar pastilles. The mode of using the coal-tar inhaler is being demonstrated, while bath-bowls and the boy-in-the-tub advertising model bulk largely. JOHN BELL, HILLS & LUCAS, LTD., restrict their display to ceregen products (ceregen food, peptonised ceregen food, and ceregen cocoa), which are remarkable for their high content of proteids and assimilable phosphates. CHAS. H. PHILLIPS CHEMICAL Co. exhibit their milk of magnesia and phospho-muriate of quinine. Freedom from alcohol is a strong point made in connection with the latter tonic. The SACCHARIN CORPORATION, LTD., display novocain and a new combination of this local anaesthetic with strychnine for producing spinal analgesia. Pergenol, the solid hydrogen-peroxide compound, which has been used with success in military hospitals, is the only other product displayed here. The DENVER CHEMICAL Co. are continuing their educative propaganda of applying antiphlogistine "hot and thick." The ANGIER CHEMICAL Co., LTD., in addition to their well-known emulsion, show petroleum throat-tablets. The MIOL MANUFACTURING Co. show a new miol combination with guaiacol for phthisis. The BAYER Co., LTD., show, among their numerous products, adalin, the new safe sedative and hypnotic, which has been described in the *C. & D.* The HOFFMANN LA ROCHE CHEMICAL WORKS, LTD., have the only display of fine alkaloids. Omnopon is given first place, the opium cake, inert extractive matter, and omnopon (180 grams from kilo. of opium) being shown. An omnopon-scopolamine combination for use previous to anaesthesia is new. MENLEY & JAMES, LTD., have a new iodex combination with methyl salicylate, for use in sprains and as a local analgesic, on view. This stainless iodine application has met with such success as to require five plants to be set up in different parts of the world. A. & M. ZIMMERMANN have full displays of Schering's modern therapeutic preparations (including atophan, a new gout and rheumatism treatment), Kalle & Co.'s pharmaceutical products, and Dr. A. von Poehl's organo-therapeutic products. THOMAS CHRISTY & Co. have a multifarious display. Gude's pepto-mangan and Mulford's heptos are important American preparations for which this firm are agents. An all-glass hypodermic syringe, complete in metal case, costing 1s. 6d., and the "Sprat" combined nasal douche, spray, and atomiser are the most interesting of the many novelties displayed.

FOODS.

Among meat-products the LIEBIG'S EXTRACT OF MEAT Co., LTD., is concentrating medical attention on nursing oxo; while BOVRIL, LTD., make physiological tests in regard to bovril their main propaganda. GLAXO food, as a cure for infants' summer diarrhœa, is the message at Stand 93. HORLICK'S MALTED MILK Co. are dilating upon the sustaining power of their malted-milk lunch-tablets. KEEN, ROBINSON & Co., LTD., show their patent groats and barley in conjunction with the mustard products of J. & J. COLMAN, LTD. Nut-foods are exhibited by MAPLETON'S NUT FOOD Co., LTD., and A. WINTER, LTD. CADBURY BROS., LTD., have a sampling-stall in oak, which includes a display of the cocoa-beans and the cocoa-essence and by-products produced therefrom. Dainty and delicious tasting-samples of Bournville and Cadbury's dairy milk-chocolate are also being distributed. ST. IVEL, LTD., put visem in the forefront of their bright display. This is a new phosphorised nitrogenous food derived from milk and lecithin. The success of albulactin in combating summer diarrhœa is the principal point made at the stand of A. WULFING & Co. It is used to prepare albumen-water in place of egg-albumen. The firm also exhibit sanatogen and formamint.

Diabetic subjects are, as usual, well catered for. CALLARD & Co. show "sugarless and starchless" products for diabetic patients, and the MANHU FOOD Co. their diabetic goods; while GEO. BACK & Co., LTD., dispense samples of diabetic whisky. CEREBOS, LTD., descant upon the purity of the phosphates used in making their saline-

products, and also optically demonstrate "how it [Cerebos] runs."

WINES AND WATERS.

Meat and malt wines are well represented. COLEMAN & Co. have a bright display of their well-known product, Wincarnis. BEAUFOY & Co. also have a big display of meat and malt wine; while H. G. KINGHAM & Co. give a guarantee that their product is made with Alto Douro port. STEPHEN SMITH & Co. exhibit carvino in conjunction with Keystone Burgundy and Hall's wine. Medical men are reminded that the bitter principle in Hall's wine prevents any habit being formed. The number of mineral waters displayed is legion. INGRAM & ROYLE, LTD., contributing largely to this. C. OPPEL & Co. exhibit Friedrichshall-water. Other waters displayed on separate stands are Nieder-selters and Fachingen, Vittel, and Vitaregis. The SALUTARIS WATER Co. exhibit their distilled-water products. An outcome of the booming of many mineral waters as being radio-active is seen at the stand of CHAS. ZIMMERMANN & Co., where the preparation of radiogen drinking-water and bath-water is demonstrated practically. The radium emanatorium for preparing radio-active air is on view, and this firm also display lysol. The curious are also attracted by Glew's collector of atmospheric electricity set up here. RADIUM, LTD., show apparatus for rendering water and air radio-active.

DISINFECTANTS.

There are practically no new ideas as regards disinfectants that have been evolved since last year's exhibition. The SANITAS Co., LTD., have a full display of their lines, and are emphasising the fact that bactox has been adopted under the L.C.C. Cleansing Act, and demonstrate the simplicity, compactness, and cheapness of their formigators. JEYES' SANITARY COMPOUNDS Co. exhibit cyllin preparations, dilating upon the high carbolic coefficient of their disinfectants. NEWTON, CHAMBERS & Co.'s stand is devoted to Izal and a demonstration of its superior emulsifying powers in regard to hard water.

MISCELLANEOUS.

EUCRYL, LTD., devote their stand to telling medical men why they should recommend eucryl tooth-powder. The CHEMICAL WORKS, HELFENBERG, A.G., have a fine range of indiarubber plasters. A. S. WEHNER & Co. display Dalloff obesity tea and Trancré's inhaler, an all-glass inhaler producing dry vapours. Droitwich, as England's brine-baths spa, is extolled at Stand 54. JAMES BARKER exhibits electrically-driven vibratory massage machines only. SALT & SON exhibit kidney-belts and trusses. The DURHAM-DUPLEX SAFETY RAZOR Co. (double-edged safety razor); R. H. WOODLAND (Eastbourne, improved invalid chair); LUNDY WILSON & Co. (lalkala asthma papers and cigarettes); KOLYNOS INCORPORATED (Kolynos preparations); PARKE'S DRUG STORES, LTD. ("Erik Hansen" cod-liver oil); POCOCK BROS. (tubular bed, etc.); REGULIN SYNDICATE, LTD. (regulin); STERN & Co. (pumiline preparations and cresote compounds); THEINHARDT'S FOOD Co. (infantina and hygiama foods); VIXOL, LTD. (atomiser); WASSMUTH'S SANUM Co. (sanum and inhalation apparatus); A. WINKLER & Co. (instep supports); G. H. ZEAL (clinical thermometers).

The exhibits of surgical instruments and electrical apparatus form quite a feature of the exhibition. The principal firms showing are the CAVENDISH ELECTRICAL Co., LTD., HAWKSLEY & SON, HOSPITAL AND GENERAL CONTRACTS Co., LTD., MAYER & MELTZER, MEDICAL SUPPLY ASSOCIATION, SCHOLL & SON.

In the Publications Section Mr. Thomas Stephenson, Ph.C., etc., Edinburgh, exhibits "The Prescriber."

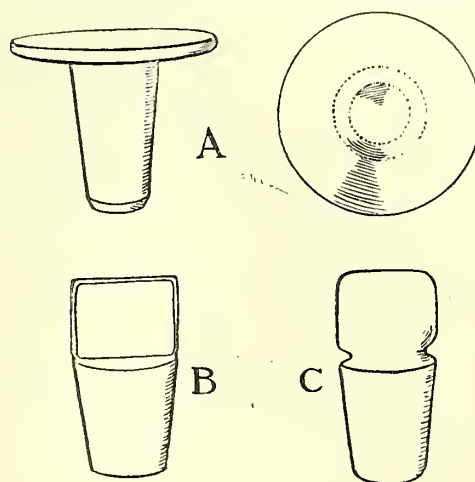
THE Leith Valuation Committee had before them on September 29 an appeal by Messrs. J. & J. Cunningham, Ltd., chemical-manufacturers, Salamander Street, against the valuation by the assessor of 3,605*l.* 10*s.* for their property there, and they sought a reduction to 2,000*l.* The Parish Council also appeared, and stated that the property was undervalued, and held that the valuation should be fixed at 5,000*l.* The Court upheld the assessor's valuation, and an appeal to the Court of Session was intimated by the other two parties.

Spiritus Aetheris Nitrosi.

By James Grier, M.Sc., Ph.C., Pharmaceutical Department, The University, Manchester.

THE proposed exemption of spiritus aetheris nitrosi from the operation of the Pure Food and Drugs Act, Tasmania, and the recommendation of the Chemists' Defence Association to the Committee of Reference in Pharmacy to reduce the strength of the spirit, have induced me to look up my notebook on the subject, and the following experiments may be of interest in this connection:

(1) Solution of ethyl nitrite in absolute alcohol (1 in 5) made by students on November 23, 1897, by Dunstan's method yielded 19.2 per cent C_2H_5ONO . Re-examined on February 14, 1905, it yielded 14.8 per cent. C_2H_5ONO , and now, September 30, 1911, it yields 12.4 per cent. C_2H_5ONO . A further point is that it is free from acidity, as it gives no evolution of NO gas with potassium iodide alone. The average loss per year for the first eight years amounts to 0.55 per cent., and for the last six years 0.4 per cent., or practically 0.5 per cent. per year. The solution was kept in a dark cupboard in a white glass-stoppered bottle not quite full, but the stopper was a perfectly fitting one, being very finely ground and completely filling up the whole neck of the bottle, in shape long and tapering (sketch A), so that it



was quite immovable when one tried to dislodge it by shaking it sideways.

(2) A specimen of liquor ethyl nitritus made by Messrs. James Woolley, Sons & Co., Ltd., for the late Professor D. J. Leech, and examined at least eight years afterwards, November 1904, gave off five volumes NO gas, and now, September 30, 1911, it yields 4.6 volumes, or 23 c.c. from 5 c.c., of which only 0.4 c.c. is evolved with potassium iodide alone. It was put up in an amber-coloured bottle furnished with a perfectly fitting stopper and kept in a dark cupboard. It will be remembered that liquor ethyl nitritus was Professor Leech's contribution to the 1898 B.P., and the above experiments substantiate his statement as to its being a stable and reliable preparation, free from acidity if made as directed by Dunstan and Dymond's process ("Year-book of Pharmacy," 1888, p. 29) and kept under proper conditions.

(3) A specimen of spt. aetheris nitrosi made by students on June 8, 1898, yielded 6.4 volumes NO gas, of which 1.2 volume was evolved before the addition of the acid, and is therefore a measure of the acidity of the specimen. When examined six years later, November 15, 1904, it yielded 5 volumes NO gas, of which 2.2 volumes was evolved with potassium iodide alone; average loss per year=0.23 volume NO gas. It was kept in a quite full white-glass bottle, with tapering, conical, perfectly fitting stopper similar to B, in a dimly lighted room.

(4) A specimen made by students in 1900-1, consisting of the strong undiluted distillate got in the preparation of spt. aether. nit., gave originally 25 volumes NO gas; three to four years later (November 15, 1904) it yielded only 2 volumes. It was kept in a pale-green glass bottle with fairly good but not perfectly fitting stopper, shape B, and the bottle was not quite full, some 2 oz. of air being enclosed.

(5) A specimen of spt. aetheris nitrosi made by students, age uncertain, but not later than 1901, gave 7.8 volumes NO gas; re-examined on November 15, 1904, it gave 1 volume

only. It was kept in a blue-glass bottle with fairly good stopper, shape C, which, however, could be made to rattle when shaken sideways. The bottle was not full, some 3 oz. of air being enclosed. Nos. 4 and 5 were kept in a dimly lighted store-room with western windows.

From these cases the inference appears to be that the first and most important consideration in keeping *spt. æther. nit.* is a finely ground, perfectly fitting, immovable stopper, preferably tapering in shape, so as to fill up completely the whole neck of the bottle, and, second, the use of bottles of suitable size so that it shall be used up within a reasonable time, as the entrance of moisture and air every time the stopper is removed facilitates decomposition. I doubt if the colour of the bottle has much effect, but it certainly ought to be kept in a cool dark place, such as a cupboard, and not exposed in a shop-round to the direct rays of the sun. It is a poor shift to recommend lowering the standard or to propose exemption from the operation of the Pure Food and Drugs Act, and neither is particularly creditable to pharmacists; but the following extracts from Professor Leech's book on the "Nitrites and Allied Compounds" (1902) may be appropriate, and certainly the record of careful work therein contained will have to be taken into account by the B.P. revisers before making suggestions with regard to these preparations:

"I believe then that the introduction of a fairly stable solution of ethyl nitrite is now called for, and that the time-honoured *spiritus ætheris nitrosi*, owing to its uncertainty, should disappear from the list of official remedies, its place being taken by the more reliable liquor ethyl nitritis in medical practice.

"The spirit might then be relegated to the use of the public. As ordinarily supplied it could do no harm, and it might sometimes do good, as a very small quantity of real C_2H_5ONO —1 to 2 minims, or $\frac{1}{2}$ to 1 drachm spirit—may somewhat lighten the load a heart has to bear and cause a feeling of comfort without producing any other perceptible effect. Even a much smaller amount than this will sometimes suffice for this purpose, and the popularity of 'sweet nitre,' both with the public and the medical profession, is largely due to this effect on the circulation.

"It is, indeed, perhaps well that the nitrous ether commonly sold contains only a small quantity of its active ingredient, for large doses of the nitrite of ethyl may so influence the circulation as to cause faintness. It would, perhaps, therefore lead to trouble sometimes if spirit of nitre as supplied to the public did always contain its due amount of nitrite.

"One of the most useful properties of ethyl nitrite is that of relieving certain forms of difficulty of breathing due to contraction of the smaller bronchial tubes, for which doses of 1 to $1\frac{1}{2}$ drachms of spirit of proper strength often gives great relief; but a spirit poor in nitrite—that is, containing less than 2 per cent.—is not likely to influence the bronchial muscles unless employed in larger doses than are usually administered.

"Nevertheless, the greater part of the spirit of nitre given has always contained much less than this—in one case as little as 0.3 per cent. Further, in order to obtain reliable results it should not be dispensed mixed with water, in contact with which it quickly decomposes, but separately, the required dose being measured out and added to water immediately before administration.

"Should, however, there be any who find, or think they find, an advantage in the spirit as compared with the more definite and reliable liquor, and both be included in the Pharmacopœia, it seems to me the present test of purity of the spirit would not be needed. For then the ethyl nitrite could hardly be considered the cause of this advantage, and this being so it would not be necessary to ask that it should contain a definite percentage of the nitrite. Certainly 'sweet nitre' should not be required to contain as much as 2 to 3 per cent. of ethyl nitrite. I cannot help thinking that had it been easy to maintain so high a standard we should have heard of more evils arising from the popular use of this drug than we have done."

CHINESE ANTIMONY.—The exports from Changsha (an important centre for the industry) during the past four years has been as follows (the figures representing tons): *Regulus*, 1909 240, 1910 803; *crude*, 1907 1,751, 1908 5,956, 1909 5,542, and 1910 7,147; *ore*, 1907 3,092, 1908 853, 1909 1,101, and 1910 1,289; *ashes*, 1908 1,597, 1909 2,225, and 1910 2,005. The success of the new antimony-refining plant of the Hua Ch'ang Co., established in 1909, is indicated by the increased export of regulus mentioned above. The plant is not capable of turning out more than 100 tons a month, but additional machinery has recently been ordered from the United Kingdom so as to cope with the increased demand.



Postal Address:
C. & D. INFORMATION DEPARTMENT, 42 Cannon Street, London, E.C.
Telegraphic Address: "CHEMICUS LONDON."
Telephone No.: BANK 852 (two lines).

INFORMATION WANTED.

We would be obliged if any reader would inform us by post-card or telephone who are the makers or agents of the articles mentioned in the following inquiries received since our last issue:

- 179/40. Thermotot: makers.
- 174/22. "Primal" hair-dye.
- 176/69. Fripp's olive-oil soap.
- 176/68. Holman's instep-socks.
- 176/610. Buccosperin: makers.
- 177/47. "Sugolina," or "Sagolina."
- 181/23. Abbott's vaccination-shields.
- 176/61. Tubogenal methane: supply.
- 178/3. "Peerless" blackhead expressers.
- 173/23. "Royal Haydokes Feet Resters."
- 175/48. Dr. Jenner's "One-Day" cold-cure.
- 173/25. "Kola" wine, "Drummer" brand.
- 175/47. Fisher's "Black Currant Cough Elixir."
- 181/18. "Jackite" for use on walls of stables, etc.
- 169/68. Whitlock's oil-soluble orange: present makers.
- 177/50. Small white-tooth combs stamped "Effective superfine, non-inflammable."
- 180/47. "Carbo-Naphtholeum," or "Carbol Naphtholeum"—a disinfectant used largely by agriculturists.

INFORMATION SUPPLIED.

During the past week we have answered inquiries as to where the following articles can be obtained, and in many cases we have given the actual makers. The information will be repeated to any other inquirers who send to this Department a stamped and addressed envelope for the purpose.

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|--|--|
| Advertising schemes (for perfumery, etc.) (173/39). | Glass unions and tubes (174/32). |
| Aluminium screw caps for glass bottles (Russian inquiry) (167/59). | Gutta-percha tissue (for India) (195/400). |
| Ammonium muriate commercial (Scotch supply) (173/73). | Howard's razor strops (176/640). |
| Antipon (174/23). | Italian and hemp twines (174/550). |
| Barton's rat-exterminator (176/69). | "Jægt" brand cod-liver oil (175/13). |
| Breast exhausters (174/320). | "Kardene" (172/29). |
| Calcutta wholesale drug-houses (177/7). | "Kolentos" (172/66). |
| Carbolic acid (for India) (195/4). | "M.A.B." dental plate brushes (174/3). |
| Cotton dispensing twine (174/55). | McClellan's ear-caps (174/45). |
| De Laval separators (174/44). | Magic tumblers (177/16). |
| Delvoix's toilet-preparations (176/52). | Nasal douche (174/321). |
| Dressing-combs (Continental) (176/18). | Potassium permanganate (Indian inquiry) (195/401). |
| "Eversafe" soothers (Pat. Nos. 12577 and 15567) (176/23). | St. Raphael tonic-wine (178/32). |
| "Formawn" inhalers, etc. (for the East) (176/64). | "Scarlet Pimpernel" perfume (179/19). |
| Flanged pill and powder boxes (172/17). | Sedway's "Trovatola" (175/49). |
| Gelignite (174/56). | "Simplex" enemas, etc. (176/42). |
| | Toilet-brushes (French makers) (176/180). |
| | Zotal (176/60). |

ITALIAN GOVERNMENT QUININE.—In a British consular report on the finances of Italy it is stated that the revenue obtained from quinine (one of the Government monopolies) during 1908-9 was 106,584*l.*, and in 1909-10 100,000*l.* The revenue during 1910-11 is also estimated at 100,000*l.*

BUSINESS KNOWLEDGE is essential to everyone connected with the retail drug-trade. It helps to turn examination knowledge into money. A great aid to getting business knowledge is our book entitled "Opening a Pharmacy," published at 2*s.* 6*d.* (by post from 42 Cannon Street, London, E.C., 2*s.* 9*d.*). It may be obtained from most wholesale houses at the published price.

OBSERVATIONS & REFLECTIONS.

By Xrayser II.

Are Chemists Prejudiced

against the St. John Ambulance Association? Dr. Stott says that some of them are; but, speaking for myself, I have never seen any evidence of this prejudice, and, personally, I have always regarded ambulance work with the most friendly eye. It is not easy to see why we should be prejudiced, for I am not aware that we suffer in any degree from the operations of those who render first-aid. Indeed, I rather incline to the belief that these people do us an immense service by attending to cases which without their aid would doubtless be bundled off to the nearest chemist. There is one aspect of the subject, however, which should not be lost sight of—namely, the difference in the result that would follow the treatment of a case by a Red Cross amateur and by a chemist. If the case ended fatally, the chances are that the chemist would be severely reprimanded for interfering in matters which he should have left severely alone, whereas the first-aid man would almost certainly have been highly commended for his promptitude and his assistance. It is the knowledge that there is almost always an attempt made to humiliate the chemist in such circumstances which renders many of us so careful, so inhumanly careful if you will, not to go one step beyond our legal obligations.

The Hairdresser's Complaint

would make a very pretty "woeful ballad," and I commend it to your poetical contributors. The poor barber! He was long since robbed of his basin and lancet, he has lost the care of our teeth, hair-powders and wigs have gone the way of all such vanities, and now we cruel cormorants of chemists are depriving him of his hair oils and washes—we, whose profits are already a mystery—very much of a mystery!—and a marvel even to ourselves. The theme is too tragic for prose. We would drop a sympathetic tear and pass on (the Walrus and the Carpenter, it will be remembered, shed tears for the oysters they were devouring) but for the patent injustice of the charge made against us. True, we sell things for the hair; but when did we not? And who has made over our rights in these things to the hairdresser? Might we not with equal plausibility charge him with poaching on our preserves? And does not he in like manner encroach upon the tobacconist and the stationer? Nay, is not his proper trade in itself more remunerative than ours? I confess I have often envied him. My hairdresser charges me fourpence for cutting my hair (I can't afford the sixpenny man on the Parade); it takes him about five minutes; five minutes at fourpence is four shillings an hour, and that is two pounds for a day of ten hours. He gets my hair (what there is of it) into the bargain, and his stock-in-trade for this service is a pair of scissors and a painted chair. I have often worked hard for thirteen hours and taken less, and my takings were not quite all profit either. And now I am charged with "a debauchery of business morals" for not relinquishing a branch of business which my predecessors carried on in times when the barber thought it almost beneath him. It is the last straw!

Parliament Reassembles

in a few weeks, and interest in the fate of the Insurance Bill is becoming more acute. Will the Bill pass? That is the first question; if it passes, how shall we stand under it? That is the second; and he would be a bold man who should venture to give a positive answer to either. What I wish now to call attention to is the organised attempt of The Incorporated Society of Pharmacy ("Pharmacy" is good) and Drug-store Proprietors to obtain what they are pleased to call their rights

under the Bill. I do not know precisely what these are, but it may safely be assumed that they do not accord with ours. The danger thus threatening us is one of the consequences of the "high-flying" policy of the Pharmaceutical Society. Mr. Spencer Turner thinks that an easier Preliminary would keep out of our trade lads who failing subsequently to pass the Minor drift into the Stores, but it does not seem to have occurred to him that a stiffer Preliminary drives lads directly into the Stores. That it does so is at least arguable, and the admitted fact that since the Preliminary was stiffened we have been suffering from an unprecedented dearth of apprentices and qualified assistants lends something more than plausibility to the argument. There can be no question that the recent rapid growth of the drug-store interest is mainly due to the fact that our examinations have become so difficult as to be virtually prohibitive to those who regard pharmacy simply as a commercial pursuit, and there is, I suppose, no crime in so regarding it, though that is not my own view. I have never, so far as I remember, advocated the lowering of the Minor standard, but it might easily be made less difficult without lowering it, and this I should like to see done. To use either examination as a barrier against possible rivals in pharmacy is a paltry as well as a suicidal policy, as I am sure Mr. Turner will agree, but I have known an increased stringency demanded for this purpose. The result of such a policy is not only to make for ourselves more dangerous rivals outside, but to create a dangerous hostile interest. This we have already done, and we shall now have that interest to fight in Parliament and all over the country.

Few Words Used in Pharmacy

occur in the latest double-section of the Oxford English Dictionary, which extends from "simple" to "sleep." It appears that the substantive "simple" was in medicine applied first to a medicament composed of only one constituent (usually a herb), and "hence" to "a plant or herb employed for medical purposes." In the quotations given it is not always easy to say which meaning the word bears, but in the definitions of the words "simpler" and "simpling" it is clear that "simples" is used in the secondary sense only, and this undoubtedly is much the commoner one. "Sinapism," as a name for a mustard poultice, occurs first in Holland's Pliny; the latest word from the same source (mercifully rare) is "sinapistic," due to G. A. Sala, who was just the man who might have been expected to call table mustard "a sinapistic condiment." In "sindaw," an old name for *Alchemilla vulgaris*, as in "sundew," the first element stands for "sen" (meaning "always"), the last is "dew." The plant had the same uses as sanicle, concerning which, says Lyte, there was a French proverb to the effect that he who has sanicle has no need of a surgeon. I am surprised to find that the Dictionary has no quotation for "siphon" or "syphon" in connection with mineral-waters before 1875. Syphons of soda and potash waters were sold in London by a firm trading as Mayo & Co. in 1867, when I first came to a situation at the West End, and probably for some time before then. The trade did not, I believe, welcome the new invention very cordially, but it must have been commonly known at that time. "Irish slate" is marked as obsolete, the latest quotation for it being 1741, but it is in Rennie (1837), and the slate is still occasionally asked for. There are a few somewhat curious omissions from this instalment. I have looked in vain for "sistent," a term given to medicines which, as Alleyne puts it, diminish or destroy "the stimulus of the nerves" and other "causes of acceleration" of the motion of the blood. "Singleleaf," a name Lyte gives to monophillon (a plant resembling lily-of-the-valley), of which he says that it is sovereign against the pestilence and all poisons, is also omitted here, though it occurs in a quotation under "one blade" in a previous section; so is "singer's plant," Folkard's name for hedge mustard, "infallible for loss of voice"; and so, too, are "sistra," a name given in "The Grete Herball" to dill, and "sinphonie" (or "simphonie"), an old name for henbane. We are told that there is no ground for the old derivation of "sincere" from *sine ccra*.

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Editorial Articles.

A "Square" Septuagenary.

WHAT a magnificent asset the Pharmaceutical Society has in the School of Pharmacy! There is no event of the year which brings to 17 Bloomsbury Square so cosmopolitan and happy a gathering as there is when the Session is opened, and Wednesday afternoon's gathering was exceptionally good. Let this be noted, for there is a little section in the "Square" which cannot be called friendly to the School, and the recrudescence of success which has attended this educational department during recent years is due to the teaching staff's competence and its loyalty in face of discouragement and some opposition. There are few, if any, extramural technical education establishments in this country outside University towns which have reached their septuagenary, and this is the oldest pharmaceutical one in the British Empire to attain this dignity of age with honour for good work done, and attractive influence for what it can do. Yet it is probably not sufficiently realised by the Council that it is the lustre of the School rather than the popularity of the Society which attracts such gatherings as that in the lecture theatre on Wednesday, and we hope that the beginning of the eighth decade brings back some of the old love for the School which was so abundant, tradition tells us, with the earlier councillors and officers of the Society.

The septuagenary meeting will be memorable by the two addresses which were delivered. M. Eugène Léger, chief pharmacist of the St. Louis Hospital, Paris, one of France's most distinguished pharmaceutical investigators, received the Hanbury gold medal as the British testimony to the value of his researches, and, unexpectedly, he gave an address on the progress of pharmacology which must have been refreshing to those who were able to follow him in his native tongue. None of us love to lose grip with the old things, even in physic, and when M. Léger reminded his audience that antipyrin has not diminished the consumption of quinine, he commenced a series of such contrasts which opened a fount of reverence for the old. Why? There is more quinine consumed to-day than ever there has been before; it is difficult for nature, augmented by modern arboricultural methods, to keep pace with the consumption of quinine. Amongst the other old remedies which M. Léger put into contrast with a multitude of the new none was happier than his reference to digitalis, which stands to-day a better understood drug, more indispensable, and less influenced by synthetics than any other member of the materia medica. It was worth giving M. Léger the Hanbury medal in order to hear his confident notes on the tried old friends of physic. His remarks did not detract in the slightest from the appointed Sessional address by Dr. Macdonald Brown, one of the most popular and best delivered addresses which have been given at these functions.

By accident of circumstances Dr. Brown, a West-end medical consultant, is a pharmacist. In harking back

forty years to his passing the Minor examination when he was sixteen years of age, he unconsciously illustrated how the present pressing difficulty of securing adequate legalised assistance in conducting pharmacies has been brought about. The conditions of qualification that sufficed in 1873 were elementary compared with those of 1911. We do not lament the fact, we merely state it. It is an evolutionary result, and there can be no reversion. The proposal to institute an assistants' examination will not ease the stringency of legalised shopkeeping, but it may be noted that it would be going back to 1873, therefore an admission that "progress" since has been bad rather than good. In another passage of his address Dr. Brown spoke rather scornfully of the British Pharmacopœia as being out of date, and so on. He is not the first one to say so; in fact, there has been too much of this from Bloomsbury Square lately, and there is need for some common-sense reflection on the matter. We need to look at the other side; the changes which are brought about by the gazetting of existing pharmacopœias as no longer legally binding, and the imposition of the new standards of a new edition. Although this applies to a small percentage of official preparations (for the majority of monographs remain *in statu quo*, although that fact is overlooked by critics), the effect of the changes is felt by manufacturers, wholesalers, and retailers, and when it happens they do anything but bless the General Medical Council for a new British Pharmacopœia. We know that the Pharmaceutical Society is interested in a publication of its own which the promoters imagine is a rival to the B.P., but that is a vain thing. The production was a mixture of the British Pharmacopœia, "Squire," "Martindale," and other books which supply information that is outside the purview of a national Pharmacopœia—a class of books which exist on their merits, and the demand for them should not be regarded as a discredit to the British Pharmacopœia. It seems necessary, however, to the existence of the "Square" book that the British Pharmacopœia should be vilified and revision work on it impeded. The sooner these and other petty policies of an anti-pharmacopœial nature are stopped the better will it be for the Society. Too much personality and too little regard for Pharmacy are apparent in these policies. No greater disaster could happen to the drug-trade than to be legally bound to standards set forth in private publications, however useful they may be as books of reference, and it is entirely for the common good that the accomplished representatives of pharmacy should give their aid in revising the Pharmacopœia whose production the law of the land has entrusted to the General Medical Council.

Pharmaceutical Reciprocity.

THE discussion at the annual meeting of the Canadian Pharmaceutical Association on reciprocity of pharmaceutical diplomas within the Dominion is worthy of note by pharmacists in all parts of the British Empire. In the past they have looked to Great Britain to lead the way in this matter, and after a great deal of discussion, culminating in action by Mr. Joseph Chamberlain when Secretary of State for the Colonies, the Council of the Pharmaceutical Society of Great Britain decided to seek powers through which persons holding Colonial diplomas might be registered without examination as pharmaceutical chemists or chemists and druggists under the Pharmacy Acts, 1852 and 1868. The necessary power was obtained in the Poisons and Pharmacy Act, 1908, and there has been some disappointment both at

home and abroad because of the delay in formulating a basis upon which reciprocity could be made mutually satisfactory. We do not share the view that harm is being done to the principle of reciprocity by the delay, and the discussion among Canadian pharmacists strengthens our opinion on the subject. Canada is bound to be reckoned with in any scheme of reciprocity, but we are faced with the fact that the pharmacists in the Dominion have not made up their minds on the subject, and that inter-provincial reciprocity is not complete in Canada. The provinces of Nova Scotia, Ontario, and Quebec at present refuse to accept diplomas granted by the Pharmacy Boards of the younger provinces, while all the Western Boards are willing to accept the diplomas granted by the Eastern Boards. The position is paradoxical, because the whole trend is westwards, and the Boards of Pharmacy in the West have something to lose and nothing to gain by admitting pharmacists from the East to registration without examination in their provinces; for the members of the Boards are themselves pharmacists in business, and for them reciprocity is equivalent to inviting competition. From the point of view of Imperial reciprocity it cannot therefore be said that Canada will be ready to negotiate with Great Britain until the Committee which has been appointed by the Canadian Pharmaceutical Association reports a year hence. As to other parts of the Empire, South Africa has also to be considered by Great Britain in formulating a basis of reciprocity, but owing to the proposed Union Pharmacy Act, nothing can be done until that Act has come into force and the authority under it has decided the grounds for qualification in South Africa. In Australia inter-State reciprocity is fairly complete, but consideration will have to be given to New Zealand independently of Australia, and there has been no recent indication from that Dominion of urgent desire for reciprocity with Great Britain. Taking everything into consideration, therefore, it seems that some time must elapse before Imperial pharmaceutical reciprocity can make much headway under the 1908 provisions.

The Supply of Antidotes.

WE reported last week an inquest regarding a case of poisoning by hydrochloric acid, when we questioned the correctness of certain statements made by witnesses and deductions therefrom as regards the duty of chemists in such matters. A good deal has been said in the newspapers about the matter, and we notice that Mr. Bremridge, of the Pharmaceutical Society, has been interviewed by a representative of the "Daily Express," and is reported to have said:

"As soon as a pharmacist prescribes he becomes an 'apothecary' in the eye of the law, and is liable to a fine of 20*l.* for acting as such when he is not a 'recognised' apothecary. If a man is brought into a chemist's in a fainting condition, and the chemist says he needs brandy, and sells it him, the chemist is liable to a fine of 20*l.* Or, again, suppose an urgent case is brought to a chemist and, as may easily happen, there is no doctor immediately procurable. The chemist is between the devil and the deep sea. Failure to prescribe may involve fatal results, while prescribing may involve a heavy financial penalty. In no other civilised country in the world does such a system exist as we have in England to-day."

Probably Mr. Bremridge used the word "brandy" merely as a convenient form of conveying to a lay mind that a simple stimulant may be all that is required; but it may be pointed out that the sale of brandy by an unlicensed person is a more serious offence than acting as an apothecary. Much of the comment in the Press is due to various incorrect reports of the inquest. One of our staff called on Messrs. Cassie & Co., Newgate Street,

London, E.C., the chemists into whose shop the man was taken, and had a talk with Mr. Ralph Cassie, who said that the facts of the case have been grossly misrepresented. The man was taken into the pharmacy by a fellow-worker, the latter asking Mr. Cassie's assistant for an antidote for the man, who was believed to have taken spirit of salt. Mr. Cassie's assistant, having in view the dangers of delay and of the indiscriminate administration of alkalies in cases where the walls of the stomach have been corroded by a mineral acid, said: "Don't lose any time. Take the man at once to Dr. Adams', in Aldersgate Street, or to St. Bartholomew's Hospital." That could have been done in two or three minutes. The advice was the best possible in the circumstances. The most regrettable thing is that the assistant was not present at the inquest, so that his version of the facts should have been placed before the jury; and the lesson, which it is the object of this note to enforce, is that whenever a chemist has any connection, however apparently remote, with a fatality which is the subject of public inquiry, he should be present or be represented thereat. Mr. Ralph Cassie, who was away from business at the time of the inquiry in question, has received several abusive postcards, which he is sure would not have been sent if the full facts of the case had been reported.

A New Artificial Perfume.

According to Justin Dupont ("American Perfumer," 1911, 167), a well-known body, hitherto completely neglected, possesses most valuable properties as an artificial perfume. He points out that amyl salicylate had been well known and frequently described for some fifty years before some clever perfumer recognised its possibilities and used it in a blend which so rapidly became a success that to-day it is a regular ingredient of most of the perfumes of the orchid type. The same thing has happened, he states, with the hydrocarbon diphenylmethane, $\text{CH}_2(\text{C}_6\text{H}_5)_2$. This body was first prepared by Zincke in 1871, and was by him described as having "an agreeable odour of orange." This is not quite correct, but the classification of odours is not part of the average chemist's work. As a matter of fact, the hydrocarbon possesses to a very high degree the aroma of geranium-leaves, and it can be used, either as a substitute or an adjunct, wherever the essential oil of geranium is employed. Diphenylmethane forms white crystals melting at 27° , and boiling at $261-262^\circ$. It is unattacked by either acids or alkalies, and therefore forms an ideal soap-perfume.

Exporting Spirits to Australia.

Spirits other than gin, Geneva, Hollands, Schnapps, or liqueurs are not allowed to be sold for consumption in Australia unless they have been matured for a period of two years. The Customs Authorities in London have issued a General Order stating the conditions upon which will be granted certificates that spirits for exportation to Australia have been matured in bond. The exporter is required to state on the export warrant that a certificate of age is required, and to pay to the Collector on the warrant a fee of 5s. for the certificate. In addition to the statement made on the warrant a request in the form specified in the Order must be made giving the specification of the spirits; this has to be signed and the official stamp affixed. In the case of blended spirits where the storage in wood is not verifiable by reference to particulars available in the official records at the warehouse of export, information must be furnished by the proprietor of the spirits as to the warehouse where the blending took place, and this has to be verified before the certificate of age is

issued. Manufacturers are advised in their own interests to notify on the certificates the fact that the spirits are being blended for exportation to Australia.

The Use of Perfumes.

The origin of the use of perfume is traced by "The Times" to a desire to hide unsavoury odours due to a lack of personal cleanliness. This theory is developed in an editorial which deals with the rise in price of essential oils, due to the prolonged drought, but it is added that the perfumes formerly employed are what would now be regarded as strong. The perfume sense of the present day is more refined, and the employment of scents is almost universal. "The Times" states that "it is not probable that the rise in price of the ingredients of perfumery will have any appreciable effect on the sale of perfumes for direct personal use. People who still use such perfumes, perhaps out of long habit, perhaps out of personal predilection and idiosyncrasy to which no exception need be taken, are generally quite well enough off to pay a little more for them, just as a rise in the price of fine wines does not greatly affect their consumption by wealthy people." The hygienic and other uses of essential oils are also referred to, and special mention is made of the germicidal properties of eucalyptus oil.

SCIENTIFIC PROGRESS.

Temperatures under this heading are on the Centigrade scale.

Epinine.—Messrs. Burroughs Wellcome & Co. have supplied us with a copy of their reply to Professor Biberfeld's latest observations, as reported in the *C. & D.*, September 30, index folio 508. They say that Professor Biberfeld, while admitting that he was mistaken as to the constitution of Epinine, still maintains that it has only one-fiftieth or less of the pressor activity of adrenaline, etc. This general statement as to the relative activity of Epinine to that of adrenaline, etc., is based on experiments carried out on rabbits. Their statement that Epinine has a tenth the activity of the pure suprarenal principle was based on the published experiments of Barger and Dale on cats, after the ratio indicated by them had been shown by clinical reports to hold good for the human subject. In view of Professor Biberfeld's reiteration of his statement, they have submitted the question to Dr. Dale, who made the original experiments, and he reports as follows:

October 4, 1911.

"I have repeated on the cat the comparison previously made by me between the action of 3:4-dihydroxyphenylethylmethanamine and that of the pure suprarenal active principle. I find that, with slight individual variations, the ratio I previously indicated holds good in the cat for the specimen of 'Epinine' solution submitted by you; for example, $\frac{1}{4}$ mg. 'Epinine' causes a rise of blood pressure equal to, or slightly greater than, that produced by $\frac{1}{35}$ mg. of the pure suprarenal principle. The ratio of activity is therefore in this case approximately one to ten. In the paper published in conjunction with Dr. Barger, dealing with the activity of this and other related amines, I pointed out that ratios of activity obtained on one species, anaesthetised in a particular way, do not necessarily hold good for other species or with different methods of anaesthesia. Since Dr. Biberfeld made his comparison on the rabbit I have repeated my experiments, using the rabbit instead of the cat. In both of the two experiments made I found that the ratio of the activity of 'Epinine' to that of the pure active principle of the suprarenal gland on the rabbit's blood-pressure was as 1 to 35. Although this does not correspond closely with the figures given by Professor Biberfeld, it indicates, at any rate, that a difference in the species used was at least an important factor in the apparent discrepancy between his results and mine. In the paper already referred to, I pointed out further that a ratio of activity obtained by observation of the blood-pressure only does not hold good even for action on other organs of the same species. It is clear, therefore, that no general statement as to the relative activity of the two substances can safely be founded on experiments in which only the blood-pressure of one species is observed. The final test of the relative value from the practical point of view must be the action on the human patient." The clinical reports which Messrs. Burroughs Wellcome & Co. have received confirm the statement that an Epinine solution has on the human patient an activity equal to that of a solution of the suprarenal principle of one-tenth the concentration.

CHEMISTS' WINDOWS.

New ideas for dressing windows are invited. Photographs of windows sent to the Editor for reproduction should be accompanied by notes on how the displays were arranged.



A First Prize Window.

This is the display of "Erasmic" soaps and specialties with which Mr. James W. Harper, The Starbeck Pharmacy, near Harrogate, won the 25th prize. The background of the exhibit was of art-green. The design, letters, etc., were cut out of white demy and gummed on to this. The letters on the window were also cut out of demy, and each letter gummed on separately. From each shelf depended festoons of artificial violets. The central tableau was separated from the rest of the window by sheets of white cardboard. It represents "His first advance." The figures were two ordinary 2s. dolls, and were dressed in costumes of the early Victorian period, the girl in white satin and the young lover in fawn tail coat, red waistcoat, black stockings, and patent-leather shoes. The girl held in her left hand a bunch of roses, some of which had fallen upon the grass. Her right hand was extended to accept a bottle of Erasmic perfume which her lover offered to her. The seat was of wood painted green. The background was composed of greenery gathered from the hedgerows, and consisted chiefly of hawthorn, wild roses, etc. The "grass" was of artificial moss. On the shelves were arranged Erasmic soaps, perfumes, shaving-sticks, face-powders, tooth-pastes, etc. The smaller articles being placed well to the front and backed up with the larger articles, such as boxes of peerless soap, etc.

PRESCRIPTION PROBLEM.

THE problem set in our issue of September 9 was from Western Australia and has produced a great variety of suggested readings. This was to be expected from the indifferent manner in which the second ingredient was written. The correct rendering of the prescription is as follows:

Extract belladonnæ gr $\frac{1}{2}$
Diuretin gr v

ft pil.

pil j t d s. mitte xv

It is the second ingredient and the directions that have given most trouble to our readers. For diuretin the renderings sent in have been:

Vanillin.
Calomel.
Hamamelin.
Kaolin.
Ferratin.
Muc. ad.

Vaseline.
Lanolin.
Inulin.
Nuclein.
Valer. amm.

Mr. E. F. W. Thorp, chemist and druggist, 96 Princess Road, Moss Side, Manchester, and Mr. M. Woods, c/o Mr. Nicholson, 18 The Pantiles, Tunbridge Wells, sent in correct transcriptions of the ingredients and the quantities, but no competitor succeeded in reading the directions

according to the intentions of the prescriber. We are sending Mr. Thorp and Mr. Woods copies of either "The Chemist's Medical Dictionary" or "Opening a Pharmacy," whichever they prefer.

The next problem is sent by Mr. H. T. Gould, Hobart, Tasmania, whose firm are well-known distillers of eucalyptus oil. Mr. Gould expresses his admiration for the way in which the difficult problems set in this column are solved. Replies must be sent to us on postcards, and these should reach us before October 16. Prizes will be awarded at the discretion of the Editor, whose decision must be accepted as final. Readers in Australia, New Zealand, and Fiji may send their postcards to the Editor of "The Chemist and Druggist of Australia," Fink's Buildings, Melbourne:—

PA Club 21
to Annand Esq
Middlesex Esq
34 4 4 2
in sign & name

Practical Notes and Formulae.

Mouth-washes.

LINCKERSDORFF, in the course of an article in the "Phar. Zeitung," 1911, 697, quotes the following formulæ from several sources:

- Swedish Mouth-wash.**
Boric acid ... 50 Gms.
Borax ... 5 Gms.
Tincture of cloves 25 c.c.
Water ... 4,000 c.c.
- Chinosol Mouth-wash.**
Chinosol ... 3 Gms.
Glycerin ... 10 c.c.
Rose-water ... 90 c.c.
Carmine ... q.s.
- American Mouth-wash.**
Thymol ... 0.3 Gms.
Spirit ... 160 c.c.
Glycerin ... 120 c.c.
Venice soap ... 16 Gms.
Carbolic acid ... 10 drops
Rose geranium oil ... 15 drops
Calamus oil ... 10 drops
Sassafras oil ... 15 drops
Eucalyptus oil ... 6 drops
Pine oil ... 40 drops
Distilled water ... 700 c.c.
- 4.**
Thymol ... 0.5 Gm.
Carbolic acid ... 2 Gm.
Borax ... 5 Gm.
Spirit of peppermint 15 c.c.
Rose-water ... 200 c.c.
Distilled water ... 300 c.c.
- 5.**
Angelica root ... 25 Gms.
Anise fruit ... 30 Gms.
Cinnamon bark ... 6 Gms.
Nutmeg ... 3 Gms.
Cloves ... 10 Gms.
Vanillin ... 1 Gm.
Peppermint oil ... 8 c.c.
Cochineal tincture q.s.
Alcohol (90 per cent.) 1,000 c.c.
- 6. Salol Mouth-wash.**
Salol ... 2.5 Gms.
Peppermint oil ... 1 c.c.
Clove oil,
Cinnamon oil,
Anise oil, of each 0.5 c.c.
Alcohol (90 per cent.)
to make 200 c.c.
- 7.**
Lactic acid ... 40 c.c.
Cochineal ... 1 Gm.
Peppermint oil ... 30 c.c.
Clove oil ... 3 c.c.
Cinnamon oil ... 6 c.c.
Distilled water ... 400 c.c.
Alcohol ... 1,600 c.c.
- 8. Formaldehyde Mouth-wash.**
Formalin ... 2 c.c.
Tincture of cinchona,
Glycerin of each 60 c.c.
Tincture of pepper-
mint ... 2 c.c.
Tincture of star-anise 1.5 c.c.
Tincture of cinnamon,
Tincture of cloves
of each 1 c.c.
Alcohol (90 per cent.) 100 c.c.
- 9. Perhydrol Mouth-wash.**
Hydrogen peroxide
solution (3 per
cent.) ex Merck's
perhydrol ... 250 c.c.
Peppermint oil ... 1 drop
Ponceau R.R. ... 0.01 Gm.
- 10.**
Vanillin ... 0.25 Gm.
Saccharin ... 0.25 Gm.
Salol ... 9.5 Gm.
Menthol ... 15 Gm.
Tincture of cochineal 25 c.c.
Spirit ... 850 c.c.
Perhydrol ... 850 c.c.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN.

Council-meeting.

THE monthly meeting of the Council was held at 16 Bloomsbury Square, London, W.C., on October 4. There was a full Council, a circumstance to which the President referred in welcoming the members back after the holidays. The President spoke sympathetically regarding the death of Albert Cooper (Kensington), Henry Wiggins (Rotherhithe), and James McMurray (Helensburgh), and reported that the Registrar attended Mr. Cooper's funeral as the Society's representative. Professor Greenish attended the annual meeting of the Apotheker Verein at Freiburg, and was well received. Part of the legacy to the Society of the late Michael Carteighe has been received, and the General Fund has in consequence been able to lend 1,000*l.* to the Benevolent Fund. A chemist's orphan has been placed in the Wanstead Orphan Asylum, the cost being a charge upon the Orphan Fund. The Organisation Committee reported that Mr. Woolcock, the newly appointed Organisation Officer, has arranged to attend fourteen meetings of local Associations during October and November, and that a scheme for federating the local Associations to the Pharmaceutical Society has been drawn up for discussion. Communications regarding the National Insurance Bill were received from the Cambridge, Exeter, and Glasgow Associations.

THE councillors present were Mr. C. B. Allen (President), Mr. W. L. Currie (Vice-President), Mr. W. H. Gibson (Treasurer), and Messrs. F. E. Bilson, A. S. Campkin, W. G. Cross, J. H. Cuff, F. J. Gibson, R. L. Gifford, D. Gilmour, A. Hagon, J. F. Harrington, J. Harrison, E. T. Neathercoat, G. T. W. Newsholme, F. A. Rogers, P. F. Rowsell, C. Symes, R. C. Walshaw, E. White, and J. R. Young.

The minutes having been read,

THE PRESIDENT welcomed the members after the two months' interval, and hoped they had enjoyed their holidays.

DEATHS.

Sympathetic reference was then made to the death of Mr. Albert Cooper, Kensington, who was formerly a member of the Council and an active worker in practical questions, he having been connected with the Proprietary Articles Trade Association and the Chemists' Defence Association from the start of those organisations. When on the Council Mr. Cooper took a special interest in the affairs of the Benevolent Fund. He was also a liveryman of the Spectaclemakers' Company. The President added that, owing to the suddenness of Mr. Cooper's death, many of the London members of Council were away from town, but that Mr. Bremridge represented the Society at the funeral.

MR. HARRINGTON said the death of Mr. Cooper came as a great shock to him, and he regretted that, owing to absence from town, he was unable to attend the funeral. He (Mr. Harrington) admired Mr. Cooper in his business capacity; he was an ardent pharmacist, and made it a point to give the public always the best, but in return he required full remuneration.

MR. ROWSELL said that he knew Mr. Cooper privately, as they were born in the same town and were bound together by other ties. He had also been associated with Mr. Cooper on the Proprietary Articles Trade Association and the Chemists' Defence Association. One thing that struck him about Mr. Cooper was that, although he (Mr. Cooper) had one of the highest class of businesses, his sympathies were always with the men who were struggling for existence.

THE PRESIDENT said he had also to report the death of Mr. Henry Wiggins, Divisional Secretary for Rotherhithe. When he (the President) with the Secretary toured London

and interviewed local chemists regarding the policy of the Society, Mr. Wiggins was one of their discoveries. He turned out to be an extremely active worker. Reference was also made to the death of Mr. James McMurray, Divisional Secretary for Helensburgh.

Arising out of the minutes, the PRESIDENT reported that Dr. Cavers, who was appointed lecturer in botany in the Society's school, had sent a letter thanking the Council for appointing him. Professor H. G. Greenish also reported that, in accordance with the desire of the Council, he acted as delegate to the annual meeting of the German Apotheker Verein, which took place at Freiburg, and was "rapturously" received, and the wish was expressed that the Society would be again represented at Nuremberg next year.

ELECTIONS AND RESTORATIONS.

Twenty members and twenty-four student-associates were elected and thirty-nine members restored to their former position. Three persons had their names restored to the Register of Chemists and Druggists.

FINANCE.

MR. W. H. GIBSON presented the report of the Finance Committee, of which the following is an abstract. The receipts of the General Fund were:

Penalties and costs	£192 15 10
Subscriptions	122 17 0
"Journal" and publications	1,889 2 3
School-fees	30 0 0
Registration-fees	107 2 0
Restoration-fees	707 16 0
Part legacy of late Michael Carteighe	1,000 0 0
Rent (15 Bloomsbury Square)	54 2 11

£4,103 16 0

After paying the amounts authorised by the Council, including a loan to the Benevolent Fund of 1,000*l.*, there remains 3,006*l.* 3*s.* 6*d.*, from which the following amounts were recommended for payment:

"Journal" and publications	£1,912 12 5
Stationery, etc.	57 2 8
Current expenses	450 0 0
Salaries, etc.	329 13 4
School and examinations	62 14 3
Law-charges	41 8 6
House	370 17 6
Library	4 11 5

£3,229 0 1

The balances on the Benevolent Fund were shown as follows:

Current account	£646 18 9
(Recommended for payment, 5 <i>l.</i> 13 <i>s.</i>)	
Donation account	63 15 1
Orphan Fund	101 5 8

In moving the adoption of the report,

THE TREASURER said the receipts included 1,000*l.*, part of the legacy to the Society left by the late Michael Carteighe. Excluding this, however, the balance in hand was larger than at the corresponding period last year. There was also 105*l.* more in hand on account of the Benevolent Fund than last year, and this would enable the Council to be more liberal in the number of annuitants. Mr. G. H. Stamp had sent a donation of ten guineas to the fund.

The report was adopted.

BENEVOLENT FUND.

The report of the Benevolent Fund Committee was considered *in camera*, after which

MR. F. J. GIBSON, in moving the adoption of the report, said that the committee considered the financial expediency of electing annuitants in December next, and came to the conclusion that owing to the healthier state of the fund four more annuitants could be elected. A list of seven candidates was put forward, the average age of the candidates being seventy-one years, and this would have been higher but for an exceptional case. The fund at present makes grants to twenty-two persons of sums over 20*l.* These are known as minor annuitants, so that it may be said that altogether there are fifty-two annuitants on the fund. The Orphan Fund is also in a healthier state, and the committee recommended that the orphan of a

chemist who died last January be placed in the Wanstead Orphan Asylum at the expense of the fund.

Mr. CAMPKIN said that events had quite justified the action of the Council two years ago, when it was resolved not to place more annuitants on the Benevolent Fund. It is noteworthy that in the case of the candidates recommended for election on the fund it will necessitate the forgoing of the Old-age Pensions. Thus, while the fund gains in some cases, the State benefits in the case of annuitants.

The PRESIDENT said it was gratifying that the Orphan Fund had been able to afford relief in another deserving case, and he explained the conditions of the fund, which, although simple, cannot often be fulfilled by applicants.

The report was adopted.

Resolutions were also passed authorising the Treasurer to make payments to the holders of the Redwood, C. J. Hewlett, Burroughs, and Bell scholarships.

APPRENTICES REGISTERED.

The Secretary reported that since the August Council-meeting he had registered sixty-seven apprentices or students.

LOCAL ASSOCIATIONS.

The report of the Local Associations Committee was then read by the Secretary. In this it was stated that the President attended the dinner of the Preston Chemists' Association, and was well received. A new local Association has been formed of the Monmouth Valleys, at the inaugural meeting of which the Society was represented by Mr. Hagon. The report also laid down the duties of the newly appointed Organising Secretary, and it was stated that Mr. Woolcock, the officer in question, has already arranged to visit meetings of fourteen local Associations during October and November. A draft was also presented of a scheme for federating local Associations to the Society, which it was recommended should be sent for discussion to the Associations concerned.

Mr. NEATHERCOAT, in moving the adoption of the report, said it was hoped to make arrangements by which the whole of the local Associations would be visited during the year, either singly or in joint sessions. Mr. Woolcock starts his duties by visiting the Harrow Association on October 11, and then he goes to Yorkshire and the North. He (Mr. Neathercoat) hoped that the ultimate results of the plan would be to improve pharmaceutical organisation.

Mr. BILSON said it was a source of satisfaction that so many Associations had accepted the services of Mr. Woolcock, and he was sure that the consequence would be that the Society would be in closer touch with its members in the country.

Mr. GIFFORD said he was delighted at the development of the policy of having an officer whose time was devoted solely to organisation work. He congratulated the Associations on having such an officer as Mr. Woolcock to visit them, as he will do the work with the greatest possible efficiency.

Mr. HAGON said that he had been asked several times whether the Organising Secretary will do any other work apart from visiting the Associations. He took it that the visits were purely for the purpose of dealing with pharmaceutical politics and not for the detective or prosecutive work.

Mr. GILMOUR said the movement was all in the right direction. He trusted that no hard-and-fast line would be drawn as to the districts which the Organising Secretary was to visit.

The report was adopted.

NATIONAL INSURANCE BILL.

Letters were received from the Cambridge and Exeter Associations suggesting that the Society ought to be represented at the forthcoming Conference which the Chancellor of the Exchequer is holding with the British Medical Association and the Friendly Societies. The Exeter Association also drew attention to the necessity for provisions being inserted in the Bill to prevent discounts or rebates being given on the dispensing tariff which the Health Boards would ultimately adopt. A communication was also received from the Glasgow and West of Scotland

Association suggesting that steps be taken to place chemists' assistants in at least as good a position for dispensing medicines as that in which doctors' dispensers are placed.

The PRESIDENT suggested that these be remitted to the Parliamentary Committee for consideration. Steps have already been taken to secure representation on the Conference between the Chancellor of the Exchequer and the Medical and Friendly Societies' representatives. The outcome of any legislative movements will be watched most carefully, and the Society will put in a claim that wherever interests connected with pharmacy are discussed pharmacists should be represented.

The VICE-PRESIDENT said that in view of the urgency of the matter the communications should be placed before the Parliamentary Secretary at once.

The PRESIDENT: He has already had copies of the letters.

EXAMINATIONS IN SCOTLAND.

The report of the examiners in Scotland was received. It stated that forty-one candidates were examined in September, and that of these twenty-six passed and fifteen failed.

This concluded the public business.

Opening of the Session.

The opening of the seventieth session of the School of Pharmacy took place in the afternoon of the same day. The Lecture Theatre, in which the ceremony took place, has been newly decorated in shades of green, and other minor improvements that have been carried out include the provision of a draught-cupboard for the use of the lecturers. There was a good attendance, including many ladies, among those present being:

Mr. A. P. Atkinson, Mr. F. E. Bilson, Mr. I. Bourdas, Mr. A. S. Campkin, Mr. R. A. Cripps, Mr. W. G. Cross, Professor A. W. Crossley, Mr. J. H. Cuff, Mr. W. L. Currie, Mr. H. Deane, Sir Edward Evans, Mr. G. B. Francis, Mr. W. S. Glyn-Jones, M.P., Professor H. G. Greenish, Mr. A. Hagon, Mr. J. F. Harrington, Mr. E. F. Harrison, Mr. Walter Hills, Mr. W. M. Holmes, Mr. H. J. Jeffrey, Mr. J. A. Jennings, Mr. S. Kutnow and Mr. Kutnow, jun., Mr. E. T. Neathercoat, Mr. E. S. Peck, Mr. H. R. Procter, Mr. R. A. Robinson, jun., Mr. F. A. Rogers, Mr. P. F. Rowsell, Mr. T. Stephenson, Dr. C. Symes, Mr. E. White, Mr. John R. Marshall, and Mr. J. R. Wretts.

The President (Mr. C. B. Allen) was supported by the Secretary (Mr. R. Bremridge) on the left, and on the right sat Dr. Macdonald Brown and Mr. E. Leger.

The PRESIDENT opened the proceedings by mentioning that he had received letters of apology for absence from Professor Crum Brown, Dr. Buchanan, of the Local Government Board, Professor Frankland, Sir Thomas R. Fraser, Mr. J. P. Gilmour (Glasgow), Mr. Cecil Hanbury, Mr. Frederick J. Hanbury, Mr. F. Harwood Lescher, Sir Donald MacAlister, the Principal of the London University, Sir William Ramsay, Dr. D. H. Scott (of the Linnean Society), and Sir W. A. Tilden. Continuing, the President said that, as pharmacists, they were especially proud of their School of Pharmacy. From the time of its foundation up to the present it had had associated with it teachers whose names and fame are world-wide. From it had been turned out students all of whom, he hoped, had done excellent credit to their *alma mater*. Some of them had become distinctly successful and famous. Many of the names which adorned the tablets on the walls bore testimony to the good work done by the School of Pharmacy. He remembered perfectly well the discussion which occurred before the boards on which the names appeared were put up. That was many years ago, in the days when Mr. Greenish, the father of Professor Greenish, was President of the Society. The discussion bordered on open warfare as to the utility of putting on the walls the names of the Society's prizemen in letters of gold. For his own part he regarded the departure as an exceedingly good one. It served as an incentive to work to those who were in a position to be able to gain some of the prizes. More than that, it served as a pleasant remembrance to those who had gained them to see their names on the walls.

The President then called upon the Dean (Professor Crossley) to read his report on the School.

THE DEAN'S REPORT.

Professor CROSSLEY stated that since his report at the prize distribution in June seventeen of the students of the School had entered for the Major examination, of whom sixteen passed. Fifty students entered for the Minor examination, of whom thirty-eight satisfied the examiners. With reference to the staff he had only one change to report. Mr. Jeffery, the Lecturer in Botany, had received and taken up an important appointment at the Imperial Institute. The Council had appointed Dr. Cavers to the vacancy, and he took the opportunity to cordially welcome Dr. Cavers, who came from the Hartley College, Southampton, where his reputation as a teacher was well established. (Applause.) He was glad to be able to intimate several successes among the old students of the School. Mr. W. R. Pratt had gained a Scholarship in the University of London, and also passed the examination for an Associateship of the Institute of Chemistry in the analysis of foods and drugs. Mr. Sidney Smith had passed the Intermediate examination at the University of London, obtaining third-class honours in chemistry. Mr. H. J. Evans had also passed the Institute examination in the analysis of foods and drugs. Mr. F. G. C. Walker, of the Health Department, Shanghai, had passed the Intermediate examination of the Institute of Chemistry. There was not such a good entry of students for the session which now opened as a year ago. There are this year 56 against 67 students, but he hoped their quality would be equal to the best traditions of the School. Concluding, Professor Crossley assured the Council that the recent improvements and alterations in the School would be heartily appreciated by those who for the next nine months would have to spend so much of their time in that building. (Applause.)

THE HERBARIUM COMPETITION.

Mr. JEFFERY, reporting on the Herbarium Competition, said that four collections were presented, all of which reached a high degree of excellence, a silver medal and two certificates being awarded. The plants selected by the different competitors were, for the most part, representative members of the British flora, and for the purpose of adjudication it was necessary to lay more stress than in former years on the completeness of the specimens and the manner in which they were preserved. In this connection it is necessary to point out that a herbarium specimen should include, in addition to the flower-shoot, the underground parts, the fruit, and, in the case of deciduous trees and shrubs, the winter shoots. When it is necessary on account of the size of the plant to mount the usual portions, the exact position of such parts in relation to each other should be noted. Some of the competitors this year lost points in regard to some or all of these matters. Another matter which would repay more careful attention was the record of the habitat of the actual specimens collected. It is not sufficient to copy the habitat as given in books, since many plants have a wide range in that respect, and the habit and form vary considerably according to the environment. On the whole the collections compared very favourably with those of previous years, and the competitors were to be congratulated on the excellent results achieved.

The PRESIDENT then outlined the conditions of the competition, and said that the collections need not include rare plants; in fact, the collection of rare plants was rather discouraged. A collector needs to be deft-fingered, extremely patient, and studious.

The PRESIDENT then called up the successful students, Mr. C. E. Corfield, to receive the silver medal, and Mr. J. C. Jinks and Mr. H. F. Hallier to receive certificates, to each a few words of congratulation being addressed.

COUNCIL PRIZE COMPETITION.

Mr. E. S. PECK, on behalf of Professor Jackson and Dr. Fritsch, read a report on the competition for the Pereira and Council medals. The successful competitors were Mr. B. M. Brander, Pereira medallist, and Mr. W. Honneyman and Miss Dorothy Bartlett, silver medallists.

The PRESIDENT then called up the students to receive their medals, giving at the same time an historical sketch of the origin of the competition. The Pereira medal was

founded in 1853 as a memorial of Jonathan Pereira, the first Professor of *Materia Medica* in the Society's School. The competition at first took the form of an essay, but this not being successful, the trustees of the fund altered the scope of the examination and handed it over in charge of the Council of the Society.

The President then presented to Mr. Brander the Pereira medal and accompanying certificate, together with the gift of books provided by the Thomas Hyde Hills Fund. This was followed by the presentation of the Council prizes to Mr. Honneyman and Miss Jessie Bartlett.

THE JACOB BELL SCHOLARS.

The PRESIDENT said Mr. Tickle was prevented from attending and reading his report on the Jacob Bell Scholarship and the Manchester Scholarship. The President explained that the first-mentioned scholarships are worth 30*l.* a year each, with free instruction in the Society's school. The adjudicators' report stated that the best papers in the examination were by Mr. John Clarence Jinks and Mr. George Robert Goodfellow. There were eleven competitors, and seven attained a sufficiently high standard to have obtained the scholarship. He then congratulated the students named, and presented them with the parcels of books provided from the Thomas Hyde Hills Fund.

The Salter Scholarship has been awarded Miss Norah Renouf, who has done a great deal of research work. The Redwood Scholarship has been awarded to Mr. Walter A. Storey.

THE HANBURY MEDAL.

It is an extremely great privilege (continued the PRESIDENT) for any President of the Society to perform the duty that fell to his lot on that occasion. He alluded to the presentation of the Hanbury medal. (Applause.) In the company of pharmacists he need say very little in regard to Daniel Hanbury. He was a most painstaking and able writer on the history of drugs and research in drugs. He was associated very closely with Professor Flückiger, with whom he collaborated in the production of a book of the most remarkable value—the "*Pharmacographia*." When Daniel Hanbury died a fund was provided for the award of a medal in his memory. The adjudicators were Professor Percy Frankland (President of the Chemical Society), Dr. D. H. Scott (President of the Linnean Society), Mr. W. F. Wells (President of the British Pharmaceutical Conference), Mr. J. F. Harrington (President of the Pharmaceutical Society), and Mr. Walter Hills; and they had decided that this year the medal should be awarded to M. Eugène Léger. He was extremely pleased to see M. Léger with them to receive the award. (Applause.) He is a man of very considerable eminence. He is the principal pharmacist in charge of the St. Louis Hospital in Paris and Past-President of the Paris Pharmaceutical Society. There are many men who have made themselves eminent in pharmacy in France, but none of them were more so than M. Léger. He is also a member of the Committee for the Revision of the French Pharmacopœia, and has devoted his spare hours to research on drugs and everything connected with them. He has made his name famous for his researches in the cinchona alkaloids and the aloins. Bearing his work in mind, the Pharmaceutical Society of Great Britain, as lately as May last, elected him on the roll of honorary members—the highest honour it could confer on any man. Following on this, M. Léger had received the award of the Hanbury gold medal, which had on previous occasions been given to other celebrated men, some of whom were associated with M. Léger. The first one to receive the award was Professor Flückiger. Addressing M. Léger, the President assured him that the Society is proud to be the medium, through the adjudicators, of presenting him with the handsome gold medal in recognition of his services to experimental pharmacy. (Applause.) One other matter he had to mention. A few years ago Sir Thomas Hanbury happened to be present at the presentation, and he noted a distinct blank in the proceedings. He thought there should be some additional award besides that of the medal, and he generously handed over a fund by which the Society is able to give a cheque for 50*l.* to the recipient. The

President then handed to M. Léger the Hanbury gold medal and the cheque, amid the applause of the company.

M. LEGER said, in English, "I am much obliged to you, Mr. President." Then in his native language he made a speech, of which the following is a translation:

In commencing, my first wish is to thank the members of the jury who have thought so well of me as to award me this year the prize founded by Daniel and Thomas Hanbury. I am happy and proud to see my name added to those well-known *savants* upon whom you have already conferred this high distinction. You will understand that in these circumstances I am especially flattered, and made happy, both by the result of the deliberations of the jury and by the spontaneous manner in which it was conveyed to me. One fine summer's day—May 18—I received a letter from your sympathetic secretary, Mr. Bremridge, which announced the good news. I experienced then a gratification which will always remain with me, and which to-day I find considerably increased. The science to which Daniel Hanbury devoted his energies, the natural history of drugs or *materia medica*, is perhaps, of all the sciences which interest pharmacists the oldest. The use of simple drugs preceded by a very long time those of complicated composition and synthetic chemical drugs. In olden times simples sufficed for the cure of ailments; as is well expressed in the old adage *Avec la sauge et la santale on fait au chirurgien la nique*. If we limit ourselves to examining vegetable drugs and the products of the art of the chemist or pharmacist which they employed, we shall not be at all surprised to find among these vegetable drugs a large number of medicaments still in use, from the emollient marshmallow to more energetic remedies such as nuxvomica and digitalis and tonics such as cinchona and valerian, so beneficent to excited nerves. If numerous chemical remedies have been introduced in our pharmacies, it would be more correct to state that these have been added to the remedies already in hand rather than to suggest that they have really replaced them. Antipyrin has not prevented the use of quinine, and the numerous hypnotic remedies have not supplanted the use, and unfortunately the abuse, of morphine. Cocaine still possesses considerable advantages over its successors, and no synthetic product has hitherto been able to replace digitalis, which continues to be, to use the expression of Trousseau, the "quinine of the heart." In the course of time, however, *materia medica*, or what is to-day called pharmacognosy, has undergone important modifications. Professor Tschirch, of Bern, who in 1909 had the honour of receiving the award which you are kind enough to present to me to-day, touched on this subject with all the ability which distinguishes him; it would, therefore, be useless now to say more on this point. As everyone knows, the number of chemical drugs continues to grow with a rapidity which some people think excessive; but how many of these drugs have more than an ephemeral value? After having attributed to them all sorts of marvellous qualities, we see them sometimes fall out of use entirely. It has been said with reference to certain of these new medicines that "they should be taken while they still cure." Despite this slight criticism, it is quite certain that a large number of medicines have been produced by chemical laboratories, the incontestable value of which has been ratified by their admission into our Pharmacopœias. An analogous progress, though less rapid, has been seen in the field of vegetable drugs, and numerous are the drugs of this nature which within the past twenty years or so, have enriched the therapeutic arsenal. Others, which had fallen into neglect are often resuscitated, as in the case of that plant which was so dear to the Druids of ancient Gaul. This tendency is likely to be accentuated. Thousands of miles of the earth's surface are unknown, or but slightly known, to us Europeans; but a "fever of discovery" has taken possession of numerous explorers, and it is not too much to suppose that their travels will contribute to increase the number of plant remedies. That science, rendered illustrious by Daniel Hanbury, does not appear to be on the eve of breaking down for lack of matter for study. There are still rich crops to be gathered, for those who are tempted by the study of pharmacognosy. The chemistry of drugs is one of the branches of this pharmacognosy. A number

of chemists of different countries, and particularly of England, have been specialising in the chemical study of drugs. In order to assure oneself of this, it is only necessary to read your professional journals, as well as the Journal of the Chemical Society. The interest of these studies has not escaped the principals of the great industries, who have not hesitated to place their laboratories at the service of research chemists, persuaded that this work, which to-day is purely scientific, may to-morrow yield practical and paying results. The chemical study of drugs is necessary for pharmacists: it is this which tells whether a drug is febrifuge, emetic, or purgative. This work gives pharmacists that scientific education without which our profession would be but an ordinary trade. It is science which raises us in the eyes of our fellow citizens, and it is this that makes the pharmacist the collaborator of the medical man. The knowledge required to-day of medical men passes the limit of human strength. The doctor needs to keep in touch with enthusiastic workers and experts. Among these the first place must be given to pharmacists. United by a reciprocal esteem, doctors and pharmacists will pursue, by all possible means, their common aim—the relief of the sufferings of their fellow creatures. (Applause.)

The Inaugural Address.

The PRESIDENT, in introducing Dr. J. Macdonald Brown, said he is well known to many London pharmacists. He has attended meetings of the Western Chemists' Association on various occasions, and has delighted members by the way in which he had criticised them. Dr. Macdonald Brown is the son of a chemist, had gone through his apprenticeship, and had passed the Minor examination. They would accept him as one of themselves. Like all those who entered medicine through the portals of pharmacy, he had been distinctly successful. (Applause.) He was for many years an examiner in Anatomy in the Royal College of Surgeons at Edinburgh, and a teacher in its school.

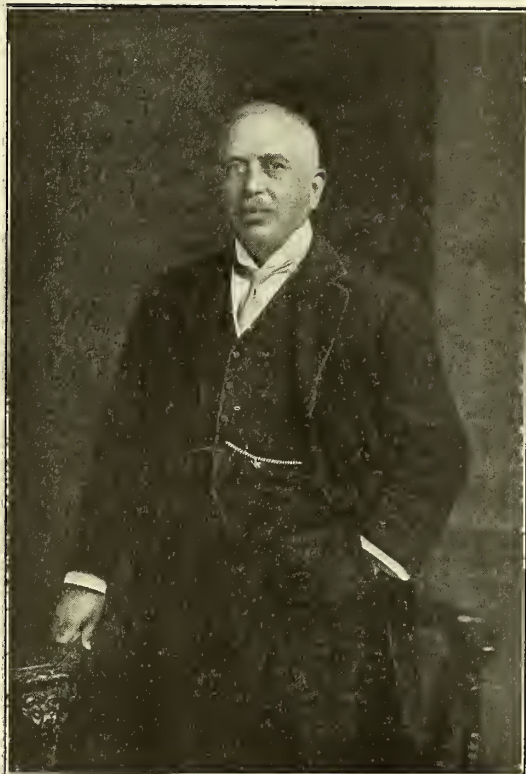
Dr. J. MACDONALD BROWN, on rising to deliver his inaugural address, was received with loud applause. He said: Mr. President, Members of Council, Students, Ladies and Gentlemen,—I very fully appreciate the very great honour conferred upon me by the Pharmaceutical Society in asking me to deliver the inaugural address of the present session. Standing here as I do, about to attempt to perform that function—one which has been done so brilliantly in past years by men of the first rank in science, medicine, and pharmacy—the position might well daunt men more courageous than myself. I very much question, however, Mr. President, if any one of my predecessors had such honour conferred on them as I have to-day, because you have, evidently with your Council, quite made me happy on this august occasion, and the building has been entirely repainted—I take it, in my honour. (Loud laughter.) I am, however, encouraged by the fact that there is no need for me to give a high-flown address on some topics of our professional world which may for a moment loom large on the horizon. Rather do I wish to speak as an old student to those of younger growth, and to give them some words of advice and help from one who has had to go through the mill himself.

In these latter days, when in every branch of profession or business competition is so keen, days when to stand still is to go backwards, the stripling who looks along the great world avenues of work must weigh well his abilities, aspirations, and, to some extent, his limitations before electing along which road he means to make his life's journey. The choice, once made, there must be no turning back from the plough, no hesitancy, but a determination to acquire a thorough knowledge of his duties and work whereby he may become a useful asset in life—not only to himself, but also to his fellows. How difficult that is to do every thoughtful man's experience only too well bears out. I assume in the case of you students here, that after due thought and deliberation, that choice of life's work has been made, and you have elected to enrol yourselves under the banner of pharmacy.

AN ANCIENT PROFESSION.

Such being the case, it is only right that you should know that the profession of pharmacy is a right ancient

one. Traces of its existence are to be found in the earliest Egyptian dynasties, and a thousand years before our era India, Persia, Japan, and China possessed somewhat extensive Pharmacopœias, as also, in later times, did Greece and Rome. It is not my purpose to-day, Mr. President, to trace the evolution of pharmacy through the ages, nor to mark how, with manifold knowledge, it gradually devised itself to the manifold superstitions which, ivy like, clung firmly round its stem and hindered its growth. The stories of astrology, of alchemy, of charms of talismans, armlets, and the like all form fascinating reading. The



DR. JOHN MACDONALD BROWN, J.P., F.R.S.E., ETC.

Dr. Brown is a son of the late Bailie William Brown, Ph.C., Dunfermline, and served an apprenticeship with him, passing the Minor examination at Edinburgh in October 1873 when he was only sixteen years old. A few years later he commenced to study medicine at the Edinburgh University, where he graduated, taking the degree of M.B., Ch.M., in the year 1885. Subsequently he studied at the London Hospital, and became a Fellow of the Royal Colleges of Surgeons of Edinburgh and London in 1883, and in 1900 took his M.D. Edin., with honours. Before his graduation in 1880 he was Grierson Bursar at the University, and subsequently was Lecturer on Anatomy at Surgeons' Hall, Edinburgh, a Demonstrator on the same subject at the University and also at Owens College, Manchester. He has been Examiner in Anatomy to Aberdeen and Edinburgh Universities and has held numerous hospital appointments. He has published papers on anatomical subjects and on the etiology of rickets, and is in practice in Upper Berkeley Street, W. He is a Justice of the Peace for London County, and resides in Hampstead.

ancient nostra, whose ingredients comprised almost every known substance, compounded often under the weirdest conditions, and whose vaunted efficacy for every ill that human flesh was heir to, became in every country a matter of national faith. Such, to the antiquary and pharmacist, is full of interest.

MODERN MYSTERIOUS REMEDIES AND AN ASININE PUBLIC.

That a similar childlike belief in mysterious remedies exists to-day, although, doubtless, in a somewhat modified form, is surely shown by the fact that John Bull spends over 2,000,000*l.* annually in so-called patent medicines, for the knowledge of whose existence and polyglot virtues he has mainly to thank the daily Press.

(Laughter and applause.) One might dwell on the evolution of pharmacy, on how the sale and compounding of drugs gradually passed through the hands of doctors, apothecaries, and grocers, into those of the legitimate pharmacist, on how pharmacy comes to the formation of the Pharmaceutical Society, to be the end of indiscriminate drug selling and dispensing, and has ultimately led to the pharmacist of to-day occupying the honourable place in the world which his education and learning justly entitle him. And so the work of evolution has gone on until to-day not only do we have the pharmacist and pharmaceutical chemist, but actually the universities have opened their arms to us, and offer us degrees in the science of pharmacy. In view of this striking mark of advancement one might apply to ourselves the words of the old hymn:

"High is the rank we now possess,
But higher still shall rise,
Though what we may hereafter be,
Is hid from mortal eyes."

(Loud laughter.) Thus it is that

PHARMACY IS A PROFESSION AND NOT A TRADE.

It is a profession, but it is poorly paid indeed. (Applause.) So poorly paid is it—I would like to hear your own views on the point—(laughter)—that a whole series of accessory articles have had to find their place on the chemist's shelves and in his showcases to enable him to earn a reasonable living at all. (Laughter and applause.) The pharmacist is something a long way above a mere shopkeeper, although his ideal life in these days is much beset with commercial difficulty—underselling, and the unfair competition engendered by drug-stores, general stores, and the like, apart from the honest and honourable position of his pharmaceutical brethren, the many detrimental aspects of the drug-tablet question which in very essence removes the whole sphere of administration of remedies from doctor and chemist alike; the asinine credulity of the British public—(applause)—with regard to patent medicines; even the financial loss on synthetical preparations which are being constantly poured forth in huge numbers from the chemical laboratories of Europe, mainly "made in Germany," whose healing virtues, advertised largely in his weekly medical journal, prompts the doctor to have a "shot" at them. The poor chemist, of course, has to order them; that lasts in most cases for a few days, and after a few doses have been dispensed newer remedies appear in the following week's number, and so those of yesterday are placed upon an obscure shelf where they remain for ever neglected and unused, serving only in fact as monuments of lost capital and doctors' fickleness. (Loud laughter and applause.)

All these, and many other minor trials oftentimes make it hard for the chemist to fight the good fight; fortified by the principles of honour, justice, and truth. (Applause.) There is, moreover, a distorted and often-fostered opinion held by a section of the British public that the prices for dispensing are exorbitant. As a recent Society paper thus addresses the pharmacist:

"Urbane dispenser of the common pill,
Compounded to resuscitate the faint,
Against your person I have no complaint,
Nor do I question your undoubted skill;
I do not ask what purpose you fulfil
By using phrases so absurdly quaint
As, let us say, 'The tincture' and 'The paint,'
Which grace your bottles and adorn your bill.
But this I ask: How can you daily fix
Your waking thoughts on incomes small as mine
And feel not those admonitory pricks
That men to conscience commonly assign,
Yet charge me never less than three and six
For that which would be dear at one and nine?"

(Laughter.) The day, however, has dawned in which the pharmacist will have his position as a scientific worker fully recognised, his work and responsibility commanding the price which can never be denied to skill and labour. To the man in the street what a wonderful variety of chemists there is—pharmaceutical, dispensing, analytical, bacteriological chemists; cash and store-fame chemists; up-to-date chemists, not-up-to-date chemists, and the like. (Laughter.) They are labelled in bewildering profusion, and, lastly—and this although he does not blazon the

fact in his windows—the prescribing chemist. Known living, that he exists everywhere in varying degree is known to us all. (Laughter and applause.) I have no wish to take up this *questio vexata* to-day. I have gone into it at some length in a lecture published in the "Pharmaceutical Journal" of December 5, 1908. (Renewed laughter.)

THE NATIONAL INSURANCE BILL.

In that part of the great National Insurance Bill lately brought before the country which more especially concerns ourselves—doctor and pharmacist—the Chancellor of the Exchequer said his object was to dissociate dispensing from the diagnosis and treatment of disease, to secure for the sick poor the same benefits that accrue to people in a better station of life—"Hear, hear," and applause)—in short, to revolutionise the whole condition of club practice for the benefit of the poorer classes. (Renewed applause.) Like every other great measure of advance, this measure, and especially this clause, has provoked much opposition and an outcry on the part of friendly societies and their doctors. I am going to pay your Society a compliment. It was hailed with acclamation by the Pharmaceutical Society, who, however, are taking every means in their power to secure full recognition of the qualified pharmacist in the scheme which is yet to be done before this great Bill can possibly become law. And our interests in this matter are being keenly watched by our Parliamentary Secretary, Mr. Glyn-Jones, M.P., whom I am very glad to see with us here to-day. (Loud applause.)

A FLY IN THE OINTMENT.

In the past doctor and pharmacist have both, in my opinion sinned deeply in entrenching on each other's domain. The future, however, begins to look bright with promise for a closer alliance, a broader understanding between them. But there is always a fly in the ointment. What an appropriate quotation to make in the company of pharmacists! (Laughter.) While speaking of the advances made one cannot but recall with feelings of regret the retrograde step taken by the Government when, in 1908, the Legislature sanctioned a change in the poison laws by which arsenic and alkaloids of tobacco were liberated from the operation of the Poisons Schedule, and it became enacted that a certain class of ordinary tradesman, without receiving any education whatever in the handling of such dangerous things as poisons, might sell these poisons to the public simply by acquiring a licence from the local authority in their particular town or district. That licence appears to be granted in most cases as a mere matter of form. To think that such looseness of conduct and action in a matter so important should have been sanctioned by any Government of the world is monstrous. (Loud applause.)

Such, then, being the position of the pharmacist, to which all you students hope to attain, let us consider for a moment the education required by the budding aspirant to those honours and privileges. The Preliminary examination, which opens the door to his curriculum, provides that the pharmacist-student has been given a sound general education. This pass, either before or just after his entrance upon his apprenticeship, allows him to spend three or four more years in the gaining of that practical knowledge of his work which in future years is to be his bread and butter, and leads him up to the Minor examination by the passing of which he becomes qualified to practise his profession.

PHARMACY AND JUVENILE PRECOCITY.

More years ago than I like to remember I had the honour to pass this famous examination, and in doing so, unwittingly—I am becoming very egotistical, Mr. President—(laughter)—conferred upon that examination a new dignity, becoming in no small sense a benefactor to the British public. It happened in this wise. With a fair share of what English people would like to rival—the *ingenium perferendum Scotorum*—(laughter)—as a mere boy of about sixteen years of age I presented myself before, and satisfied, the Board of Examiners in Scotland, and subsequently had conferred upon me the dignity of what, in those days, was called an Associateship of the Pharmaceutical Society, but to-day has been lifted into the membership of that august body. Whether it was that my juvenile precocity

raised the ire of the more aged members of the Board, or whether I was the newest of many offenders, I know not, but not many months elapsed before—I believe it was at the instance of Sir John Simon—the age limit was raised to twenty-one years, thus bestowing upon you students more compulsory leisure for your studies and so ensuring for the British public that if ever they were poisoned or otherwise ill-treated at the hands of pharmacy, the crime would be entrusted to the care of men mature at least in the eyes of the law. (Loud laughter.)

THEN AND NOW.

To the subjects of examination of those days, which were botany, chemistry, practical chemistry, materia medica, pharmacy, practical pharmacy, with dispensing and the reading of prescriptions, have been added the science of physics and practical microscopic work. Moreover, the scope of each subject has been most necessarily extended, and so far as I know the candidate can present himself to-day for examination straight from his employer's shop, as I did myself. Yet he is strongly recommended by the powers that be to receive at some school of pharmacy a systematic course of instruction occupying a period of not less than six months, such a course to include at least sixty lectures in chemistry, forty-five lectures and demonstrations in botany, twenty-five lectures on materia medica and pharmaceuticals, and eighteen hours weekly at work on practical chemistry. These recommendations surely ought to cease to be merely such by becoming compulsory—(hear, hear)—so as to ensure that every chemist should be compelled to reap the advantages that such a curriculum in a well equipped school such as that in which we are now assembled would eventually bestow upon them. But while admitting this I cannot agree with the motion adopted the other day by the German Pharmaceutical Society, which runs thus: "That the candidate be placed on an equality with an assistant in practice in a pharmacy if the candidate has been successfully active as an assistant or practitioner in a pharmaceutical high school institute, and if he submits proof thereof by means of a certificate of the responsible high-school instructor."

A PLEA FOR APPRENTICESHIP.

Mr. President, were it not that the college practical pharmacy course is invariably supplemented by that more real course—actual dispensing which alone pertains to the shop or the hospital—one would be inclined to single this out as the one weak spot in the pharmaceutical curriculum. (Hear, hear.) No amount of the making up of mixtures, potions, and such like, whose usual destination is the laboratory sink—(laughter)—and not the human gullet, can ever take the place of those years of apprenticeship, and it may be of assistantship where, in the dispensing of the prescriptions, accuracy must stand first not merely as a scientific acquirement, but because there looms largely into it the human element, its ultimate goal and result. In our profession, as in its sister medicine, this practical education is one which no college, however learned or well equipped, can supply, and I am one of those old-fashioned people who deplore the fact that apprenticeship in the practice of medicine is now a thing of the past. ("Hear, hear," and applause.) There is so much practical knowledge to be gained by being brought face to face with the actual and real that, to my mind, nothing can ever replace the experience thus gained. (Applause.) My predecessor, Mr. Howard, said last year the real apprenticeship is far, far better, and let no one grumble if it means drudgery. How much of the life of the successful man is made up of drudgery, he asks, and how much of his success depends on his having been trained not to shrink from drudgery. (Hear, hear.)

B.P. STODGY, INCOMPLETE, AND OBSOLETE.

Theoretical and practical education in such a college is thus but incomplete without the apprenticeship, notwithstanding all its work and hardships. (Applause.) In reading through the long list of text-books recommended for the course of study for pharmaceutical examinations I am extremely sorry to find my old friends "Attfield's Chemistry" and "Bentley's Botany" omitted from the list, while in materia medica also former tried friends have disappeared. In pharmacy itself the British

Pharmacopœia is, of course, still placed at the top of the list. To even hint that this, "the Bible of Pharmacy," is stodgy, incomplete, and uninteresting is heterodox doubtless, but nevertheless it is true. (Laughter and applause.) And this despite the fact that the compilers declare in the preface to this most august work that they had been aided by a pharmaceutical committee furnished by this Society, had been assisted by men renowned in various branches of science, and had made constant use of important practical researches which had been carried on by British pharmacists. Each edition of our standard work, published as it is at long intervals, has been practically obsolete before publication. (Laughter, "hear, hear," and applause.) To remedy this the Pharmaceutical Society in 1907 produced a Codex which has for its object the incorporation of all remedies in all countries used in the treatment of disease. A supplement of the Codex appeared in 1908, and I understand that a new issue, in which the contents are entirely rewritten, rearranged, and thoroughly brought up to date, may be expected about the end of this month. (Applause.) Personally I have always felt that the compilation of our Pharmacopœia has been hitherto based upon a false foundation, that its production ought to have been left mainly to the Pharmaceutical Society—to the pharmacist first, to the medical man afterwards. (Hear, hear, and applause.) That the general provision of the last edition was entrusted by the General Medical Council to a committee comprised of nine doctors and one chemist is, to my mind, an anachronism—(applause)—which in editions to come will be swept away by the progressive spirit of the age. Only the other day Sir Donald MacAlister informed us that a new edition is at last in contemplation under the joint editorship of Professor Tirard and Professor Greenish, who, in their respective spheres of therapeutics and pharmacy, hold a foremost place in this country, and our grievances may confidently be left in their hands for remedy. ("Hear, hear," and applause.) Still, I do trust that the pharmacist will be allowed much more freedom of action than has apparently been given in the past, so that our standard work on pharmacy will be one worthy of the name in the list of books on pharmacy. (Applause.) To me it is unspeakable that Martindale's "Extra-Pharmacopœia"—most excellent of all books of reference—is omitted altogether. There are also text-books and prescriptions for the student to ponder over, and, lastly, histology has to be practically studied. A goodly list of manuals on the microscope and its special application to pharmacy appear in the list of works recommended to him. One of these I read only the other day with much interest and profit—namely, "Microscopical Examinations of Food and Drugs," by Professor Greenish. (Applause.)

The Minor examination passed, the student blossoms into a pharmacist, is registered as a chemist and druggist, and becomes eligible for election as a member of the Pharmaceutical Society. I feel this point very sorely, because they never gave me the membership—I remain an associate. (Laughter.) That this goal attained closes the student and the examination career of the great bulk of students is shown by the fact that while there are between 13,000 and 14,000 pharmacists in this country to-day, there are only between 2,000 and 3,000 pharmaceutical chemists. The passing of the Major examination enables him to register as a pharmaceutical chemist, and he becomes like his friend the doctor, exempt from service upon all juries and inquests.

THE DUAL TITLE.

The average Englishman—I do not want you to pay attention to this—(laughter)—the average Englishman, however intent he may be on the absorption of an ounce of castor oil, does not pause to ascertain whether he acquires this at the hands of a Minor or a Major, nor can he discern any difference between them. (Laughter and applause.) The dual title over a shop, "chemist and druggist," may indeed seem more comprehensive to him than "pharmaceutical chemist," just as in the case of the old lady who gave as her reason for the selection of one medical man—"I saw Dr. Smith had after his name 'physician and surgeon,' while Dr. Jones had only 'M.D.'" (Loud laughter.) Of the trials, perils, and honours of

the Major examination I am not qualified to speak. A glance at the syllabus is quite sufficient to show its difficulties, and the wide range of knowledge—theoretical and practical—required in the various subjects, which includes the holding of this diploma, may well be treasured by its fortunate possessors. A cheering word to the students. Sir William Ramsay, speaking before the British Association in August, very much deprecated the necessity for examinations at all, and went as far as to say, even for medical students, they might by and by be dispensed with altogether. What a delightful prospect! (Laughter.) For what student does not know and remember all the terrors of his examination days, the sinkings of the heart, hope alternating with despair, etc.? Who has not heard of the beastly unfairness of the examiners, the bad luck of our written and oral alike? Why, the symptoms of so-called "examination funk" are classic. (Laughter.) One can quite sympathise with the nervous candidate for ecclesiastical honours at Oxford who, when asked to name the Major Prophets, answered that he declined to make any invidious distinction. (Loud laughter.) There is also, let me assure you, an obverse to this lecture, and that instead of blaming the examiner and call him names, he is frequently rather to be sympathised with. How would you like, in turn, to be an examiner, equal to all occasions, to all questions? Of course, they do all the questioning, fortunately for them you will say. (Laughter.) But I would like to enlist your sympathy on behalf of many of the examiners. A candidate who had screwed up the last pitch and it took a good deal of whisky to do that—(laughter)—entered the examination hall and sat down. The examiner asked him some question—"What is so-and-so?" The man said "God knows." (Roars of laughter.) The examiner was a practical hand, and he said, "May I assume that He shares the knowledge with anyone?" (Renewed laughter.) I know that in pharmacy you have to recognise the drugs and chemicals submitted in order to pass through your practical examination, and I do not know what particular methods you adopt, but we have in anatomy—when I was an examiner in one of the Scotch Universities—appalling methods of doing things. You are all aware that in the human wrists are several bones. There are some eight of these on each other side, and they are difficult to recognise, not only to tell their names but especially to tell whether they belong to the right hand or to the left hand. A self-respecting anatomical student examiner would ask "What is that?" "That is a carpal bone," the student might reply. "Very good," the examiner will exclaim; "is it from the right hand or the left?" And if the student says it is the right, he will tell by what method he was able, from the markings, to tell whether it was right or left. I myself was confronted with the following: A student appeared before me who had a stutter in speaking. "What is that large bone?" I inquired. He told me. "Good," I said; "Can you tell me now which is its side—right or left." After a slight pause he replied "r-right." "Good again," I remarked. "Now will you tell me how you manage to recognise it?" "I t-t-tossed for it," the student at last explained. (Loud and renewed laughter.)

Ladies and gentlemen, those who can do, and those who can't criticise. That is what Ebert Hubbard says in last month's number of an interesting American magazine called "The Philistine." And this is perhaps never more true than during the examination periods. Another feature has in recent years been added to pharmaceutical life in the enrolment under its banner of the eternal feminine. I must be very careful here. (Laughter and applause.) Even in this enlightened age there are ingrates who still believe in the old proverb that "Women, priests, and poultry never can have enough." (Slight laughter.) A large portion of my audience must be Scotch! (Loud laughter and applause.) The old days in which women's sphere was the management of the home are happily not gone—(hear, hear)—but necessity—the greatest maker of laws—has compelled many of our young women to stand by themselves in the world, to go into its turmoil and work for subsistence. (Applause.) This is neither the time nor the place to discuss a question of such complexity as the aspirations and capabilities of women. (Laughter and applause.) Here, however, we

must accept facts as they exist; and in pharmacy woman has arrived and within the last few years has made her influence felt. A large share of academic appointments and honours has fallen to her lot, and let me say pharmacy provides a most suitable sphere for her energies. ("Hear, hear," and applause.) Sir Henry Butlin, in opening a medical school the other day, bestowed a warm eulogium on the sex—and he ought to know. He said, "I think many women possess the qualities required for scientific investigation in a higher degree than men, these qualities being dexterity, neatness, industry, patience, and perseverance." (Applause.) Emerson says that the cheapness of man is every day's tragedy, and in this, unfortunately, you ladies must share, for although the proverb has it "A useful trade is a mine of gold," I sadly fear the proverb-maker knew nothing of the hardships of pharmacy, or he would have made it an exception to prove his rule. ("Hear, hear," and applause.) The work of the average pharmacist is poorly paid, yet it is not only an honourable calling, but one whose duties are most fascinating. Although his life is not one of cultured leisure, still it affords him a spare hour for the acquirement of further knowledge. In spite of many pettinesses and hours of confinement and drudgery, his life is a smooth and pleasant one. Some little comfort may, perchance, be gleaned from the words of Douglas Jerrold, who says: "The closest of trades have their moments of pleasure. If I were a gravedigger, or even a hangman, there are some people I could work for with a great deal of pleasure and enjoyment." (Loud and continued laughter, followed by applause.)

And now for the lastly of this little sermon, and that is the question of work. Georges Sand says, "Work is no man's punishment. It is his reward and strength, his glory and his pleasure." And Lowell goes on still further. "No man," he says, "is born into the world whose work is not born with him. There is always work and tools to work withal for those who will." "All work of man," says Carlyle, "is as the swimmer's, when the waste ocean threatens to devour him; if he front it not bravely it will keep its word. By incessant, wise defiance of it, lusty rebuking and buffeting of it, behold how it loyally supports him, bears him as its conqueror along." Ladies and gentlemen, life is an infinite aggregation of the virtue "to do," and when I speak of work let it be understood that I speak of the work of a student rather than the daily toil of the pharmacist. Everything is now made so easy to the student of to-day that he is in the peril of sharing with Scotsmen the anathema of Lord Rosebery, who accused his countrymen the other day of being in danger of becoming spoon-fed. (Laughter.) In addition to lectures, demonstrations, and text-books, coaches and crams of the most varied character abound. And such, in my opinion, flourish mainly because the tendency of the age is to work for the examination and not for the knowledge of the work itself. A long experience in the teaching and examination of medical students has convinced me of this, and doubtless my pharmaceutical brethren exhibit similar symptoms. By the work one knows the workman, and nowhere is this more true than in pharmacy. Let us postulate that examinations are necessary evils, evils that have to be met and conquered. But they ought to be regarded as mile-stones along the road to knowledge, and not looked upon as goals which, when once reached, mean the end of the student's work. No, the ideal life of the student is one in which regular, conscientious daily work should be thoroughly done from the beginning of the session to its close. The idler who moons away his earlier months often strives by burning huge quantities of the midnight oil to get himself into trim against the awful examination day. And though he may be successful then, the knowledge he has gained is not sure to last, and is easily dissipated, and leaves him to begin the battle a soldier whose tactics are feeble and whose armour is faulty and weak.

And here let me say that the glory of modern science teaching is the very large rôle that practical work plays in it. Lectures and text-books, the lecture-theatre and the study are all very well, but to be efficient it is the laboratory and dispensing counter on which we must mainly rely. As most of you are aware, the Pharmaceutical Society was founded in 1841, was granted a Royal

Charter in 1843, and that here to-day the seventieth session of its School of Pharmacy begins. This School, the mother of so many kindred schools throughout the country, has, I am informed, never been so prosperous, and every bench is occupied. And so, fellow-students, I have the honour to declare the session of 1911-12 open. What its future can mean to each and all of you no one can foretell, but one may venture to prophesy that, if you only take full advantage of the many excellent opportunities which will be afforded you within those walls during six months of work, if you will labour honestly and whole-heartedly, your success as a student and examinee will certainly follow. What is far more important, your life's work hereafter will be honourable, useful, and pleasurable, because the edifice of your knowledge will have been reared upon a sure and steadfast foundation, and nothing can ever deprive you of those sunny memories of student days well spent which are the student's heritage; memories whose lustre never can be dimmed, even by the lapse of long years. Let your motto be "Thorough" and God prosper the work. (Loud applause.)

VOTE OF THANKS.

Sir EDWARD EVANS, in proposing a vote of thanks to Dr. Macdonald Brown, said he would avail himself of that opportunity as President for the coming year of the British Pharmaceutical Conference of advertising the fact that the next meeting would take place next year in what Dr. Brown would agree with him in describing as the most beautiful city in the Empire—Edinburgh. He had already received promises of interesting papers from some eminent men. Proceeding, Sir Edward said that it is very seldom they have the opportunity of listening to such an excellent and entertaining address. (Applause.) Dr. Brown had not said a single word too much, and every word he uttered was of interest. To the young men present he (Sir Edward) would say that the higher the education of the pharmacist the better equipped he will be to go on in life and the more likely he is to succeed. There is a future, and a good future, for everyone who is highly equipped in the requirements of his profession.

Mr. W. L. CURRIE, in seconding, said he happened to belong to that class of individuals whom Dr. Brown had applied the term *ingenium perfervidum Scotorum*, and fully enjoyed the many similes he brought forward in the course of his remarks. The present laxity with reference to the Major examination is due to the commercialism which has entered into their calling. Dr. Brown had said that the average Englishman—he might have said Scotsman as well—(laughter)—does not quite understand the difference between a chemist and druggist and a pharmaceutical chemist, while he gave an instance of the physician and surgeon being regarded as a better man than an M.D. He gave an instance where a lady noticing "Pharmaceutical Chemist" on an Edinburgh pharmacist's door asked him if he dispensed prescriptions! He promptly had "Dispensing" placed where was "Pharmaceutical." (Loud laughter.)

The vote was carried by acclamation, and Dr. Brown briefly acknowledged it.

Light refreshments were afterwards served to the company in the hall, and the premises were open for the inspection of visitors.

Minor Examination Results.

We have received from the Registrar of the Pharmaceutical Society of Great Britain the following list of persons who were successful at the recent Minor examinations held in London and Edinburgh:

EXAMINATION HELD IN LONDON.

Davidson, Mary E., Blackheath	Robertson, W. John, Brixton
Davies, Evan Owen, Eglwysrwrw	Roe, Colin J. G., Notting Hill
Davies, Sydney W., Pontardawe	Rogers, W. S., Narberth
Davy, W. Ewart, Elsecar	Rout, Herbert P., Norwich
Dewsbury, Harold, Walsall	Sandbach, John, Ellesmere
Evenden, Edgar, Stockwell	Sellars, Sidney, Skegness
Fairclough, P. R., Kensington	Sinnett, S. R., Islington
Goodwin, Percy D., Coggeshall	Stewart, A. J. S., Canonbury
Humphreys-Lewis, R. W., Llan-gefni	Sumption, A. C., Blackwood
Jackson, E. R., Basingstoke	Tamplin, E. C., Kingston-on-Thames
Lander, William, Derby	Taylor, F. T., Newport Pagnell
Levi, Harris, Manchester	West, Gertrude M., Wadebridge
Lewis, Taliesin, Ammanford	Wren, Richard W., Westcliffe
Morgans, Llewelyn, Towyn	

EXAMINATION HELD IN EDINBURGH.

Anderson, W., Turriff
Allan, J. Shewen, Liverpool
Bowness, W. John, Flinby
Burnett, James, Fraserburgh
Cruikshank, A., Aberdeen
Cruikshank, C., Glasgow
Davies, James, Garth
Dawson, John, Alloa
Foggett, W. Tweedy, Southport
Gaddes, A. C., Newcastle-on-Tyne
Garvie, James, Bo'ness
Gilroy, Michael, Haddington
Gordon, Agnes F., Braemar
Jones, W. Henry, Southport

Jackson, Margaret A., Harrogate
Kirby, John, Northallerton
Mackie, G. jun., Edinburgh
Matheson, J. Fraser, Golspie
Mitchell, W. R., Peterhead
Sanderson R. T., Peebles
Simpson, Alexander, Alloa
Simpson, J. D. M., Aberdeen
Smith, Harry, Edinburgh
Stevens, Elizabeth T., Cirencester
Urquhart, W. Watson, Muirkirk
Vallans, W., Blaydon-on-Tyne

National Insurance Bill.

Present Position and Prospects.

THE opinion has been growing lately that the difficulties in the way of the passage of this measure are so great that it will not be persisted in this Session. Mr. Lloyd George has intimated, however, that it is to go through. Dr. T. J. Macnamara addressed his constituents at Camberwell on Monday evening, October 2, and quoted the following statement made by Mr. Lloyd George in a letter to him:

"You may tell your friends in London that the Government means to press the Insurance Bill through during this autumn session. There is no idea of abandoning any part of it. We shall stand or fall by it as a whole. The suggestion that we should, at this stage, divide the benefits—carry a third of them on to the Statute Book this session and postpone the rest—is a particularly fatuous one."

Mr. Winston Churchill addressed his constituents at Dundee on Tuesday evening, October 3, and made a preliminary reference to the Bill, whose objects and provisions he discussed more fully on Wednesday evening. He said:

"The Bill is going to pass. It is going to pass this year. There can be no question, so far as we are concerned, of dropping it or any parts of it. We are prepared to stake our existence as a Government, and our credit and influence as individuals, upon this great measure and its passing into law. We are determined that this rich inheritance should not be prevented from reaching the homes of the people and giving them the security which, more perhaps than anything else, they need, by the cavilling of discordant criticism, by the selfishness of vested interests, by the disingenuous intrigues of Tory wirepullers, and by the open hostility of the Socialist Party. We are looking ahead. Ten years hence all this chatter will be still. Ten years hence a vast national system of insurance will have become as much a part of our daily life as the Post Office or the tramways are to-day."

It is clear, therefore, that the Bill is to go on. The Committee had got the length of Clause 17, and passed it when Parliament adjourned, this dealing with the power to approved societies to subscribe to hospitals, etc., and it concludes the Administration of Benefits part of the measure. The Bill consists of eighty-seven clauses in seventy-eight pages. When Parliament resumes it will begin on the Approved Societies part of the Bill, Clauses 18 to 23. Clause 18 is at the bottom of p. 16, so that sixty-two pages have still to be worked through. After it goes through Committee, the report stage of the Bill will be taken, when amendments to any part of it may be moved; then comes the third reading, with the probability of more amendments. The House of Lords has then to deal with it, and it is to be expected that opponents of the measure who are not satisfied during the Commons stage will seek the help of the Lords, so that still further amendment in the Upper Chamber is possible. The House of Commons has to agree to anything the Lords do before the measure is submitted for the King's approval. Parliament meets on October 24.

Contracting Out.

We reported last week (*C. & D.*, September 30, index folio 515) that the Fifehire Pharmaceutical Association had discussed the question of contracting out arising from Clause 14 (3) and (4)—viz:

(3) The regulations made by the Insurance Commissioners shall authorise the local Health Committee by which medical

benefit is administered to require any persons whose income exceeds a limit to be fixed by them, and to allow any other persons, in lieu of receiving medical benefit under such arrangements as aforesaid, to make their own arrangements for receiving medical attendance and treatment (including medicines and appliances), and in such case the committee shall, subject to the regulations, contribute from the funds out of which medical benefit is payable towards the cost of medical attendance and treatment (including medicines and appliances) for such persons sums not exceeding in the aggregate the amounts which the committee would otherwise have expended in providing medical benefit for them.

(4) The regulations may provide that, in the case of persons who are receiving medical attendance and treatment under any system or through any organisation existing at the time of the passing of this Act, and approved by the local Health Committee and the Insurance Commissioners, such medical attendance and treatment may be treated as, or as part of, their medical benefit under this part of this Act, and may provide for the committee contributing towards the expenses thereof the whole or any part of the sums which would be contributed in the case of persons who have made their own arrangements as aforesaid.

A resolution was unanimously adopted for transmission to the Council of the Pharmaceutical Society, and it was remitted to Mr. David Storrar to finally adjust the terms of the resolution, which he has done as follows:

"That this Association recognises the progress which has been already made, during the passage of the National Insurance Bill through Parliament, in conserving the interests of pharmacists, a progress for which they are much indebted to Mr. Glyn-Jones, M.P., but is of opinion that until the Bill becomes law the utmost watchfulness is necessary not only to obtain amendment upon that portion of the Bill still unconsidered, but also to restrict the application of certain of the amendments already made.

"The attention of Mr. Glyn-Jones and the Pharmaceutical Council's committee is more especially called to Clause 14, Sections (3) and (4), the meaning of which requires clearing up. This Association has no doubt that the special arrangements for the supply of medical benefits rendered possible by these sections were intended to be limited in their application, but in their present form they may lead to a wholesale 'contracting out,' and leave in the hands of approved societies their existing power—with all its abuses—of contracting direct for medical attendance and benefits for the bulk of those insured under the Bill.

"The lesson of the Poisons and Pharmacy Act must not be forgotten. Under its provisions the special licences were only to be granted in districts where 'the reasonable requirements of the public' for certain poisons were not already met; but instead of this restriction being attended to the local authorities have granted licences almost indiscriminately, and in the case of this Bill the local Health Committees might follow suit, more especially if any portion of the cost of medical benefits is likely to fall upon the rates."

We may recall the fact that Mr. Glyn-Jones has on the House of Commons papers verbal amendments to Clauses 42, 43 and 45 and to Schedule 1, as well as a new clause to create local pharmaceutical committees.

NEW BOOKS.

Any of these books printed in the United Kingdom can be supplied, at the published price, to "C. & D." subscribers on application (with remittance) to the Publisher, 42 Cannon Street, London, E.C. These notes do not exclude subsequent reviews.

Blount, B., and Bloxam, A. G. *Chemistry for Engineers and Manufacturers*. 2nd edit. 8 $\frac{3}{4}$ ×5 $\frac{1}{2}$. Pp. 404. 14s. (C. Griffin.)

Cassell's *Cyclopædia of Photography*. Edited by B. E. Jones. 10 $\frac{1}{2}$ ×7 $\frac{1}{2}$. Pp. 580. 10s. 6d. net. (Cassell.)

Glassington, C. W. *Dental Materia Medica, Pharmacology, and Therapeutics*. 2nd edit. 7 $\frac{1}{2}$ ×4 $\frac{3}{4}$. Pp. 300. 6s. net. (Churchill.)

Ludlam, E. B. *Outlines of Inorganic Chemistry: with Special Reference to its Historical Development*. 7 $\frac{3}{4}$ ×5. Pp. 352. 4s. 6d. (E. Arnold.)

Massee, G. *British Fungi, with a Chapter on Lichens*. 8 $\frac{3}{4}$ ×5 $\frac{1}{2}$. Pp. 362. 7s. 6d. net. (Routledge.)

Scott, Kenneth. *Refraction and Visual Acuity*. 7 $\frac{1}{2}$ ×5. Pp. 302. 6s. net. (Rebman.)

Worden, E. C. *Nitrocellulose Industry: a Compendium of History, Chemistry, Manufacture, etc.* 2 vols. 8vo. 42s. (Constable.)

ASSOCIATION AFFAIRS.

Brief Records.

Chemists' Assistants' Reform Union.—We are informed that the Mr. Kirkwright who was appointed local Secretary for Harrogate is not Mr. A. Kirkbright, of 7 Westmoreland Street, Harrogate, who informs us that he has nothing whatever to do with the Union.

Sheffield Pharmaceutical and Chemical Society.—At the meeting held at Sheffield on September 27, with Mr. G. T. W. Newsholme in the chair, twenty-two new members and twelve new associates were elected, making the strength of the Society greater than it has been for several years. Messrs. J. Evans, J. Austin, A. R. Culverhouse, H. R. Hammond, G. Squire, and H. Antcliffe (Hon. Secretary) were among those present. It was decided to nominate a divisional secretary of the Pharmaceutical Society for each of the five parliamentary divisions of Sheffield.

Chemists' and Druggists' Society of Ireland.—This Committee met on September 30 in Rooms at 11 Waring Street, Belfast, Mr. Robert Cambridge (President) in the chair. There were also present Messrs. S. Gibson, J.P., Wm. Haslett, J. Walsh, J. D. Carse, S. Saffern, W. E. Wilson, Geo. Johnson, S. Nevin, J. Frackelton, W. J. Busby, Jas. Macauley, D. O. Perry, R. A. Jamison, and W. J. Rankin (Hon. Secretary). It was decided to summon a meeting of the members for October 12 to consider the proposals contained in the Poisons and Pharmacy Bill (Ireland). It was also decided on the suggestion of the Hon. Secretary to ask the Council of the Pharmaceutical Society for their views on the Bill, and if they have any amendments to propose.

Chesterfield Pharmacists' Association.—The first meeting of this Association took place at the Hotel Portland on October 3, the President (Mr. A. W. Greaves) in the chair. The following were elected: *Vice-President*, Mr. George Wright; *Committee*, Mr. T. E. Furness and Mr. J. Dent (Chesterfield), Mr. F. J. Houston (New Whittington), Mr. T. H. Bradley (Staveley), and Mr. Twelves (Whittington Moor); *Hon. Auditors*, Mr. Twelves and Mr. Dent. The rules as framed by the Committee were approved. Mr. J. R. D. Barfoot was re-nominated divisional secretary of the Pharmaceutical Society. The Treasurer is Mr. Sidney Greaves, and the Hon. Secretary Mr. J. H. Topliss. Meetings are to be held on the second Tuesday in the month during the session.

Chemists' Assistants' Association.—The following is the programme for the half-session from October to Christmas:

- Oct. 12.—Inaugural Address. Chairman, Mr. F. Naylor.
- „ 19.—Social evening.
- „ 26.—Paper: "A Hospital Pharmacist and his Duties," by Mr. F. A. Hocking, B.Sc.
- Nov. 2.—Social Evening.
- „ 9.—Impromptu.
- „ 16.—Paper: "The Evolution of a Tincture," by Mr. T. Pilkington Sargeant, F.C.S.
- „ 23.—Lecture by Mr. James Cantlie, F.R.C.S.
- „ 30.—Annual Reunion.
- Dec. 7.—Social Evening.
- „ 14.—Paper: "Two Thousand Years of Chemistry," by Mr. W. B. M. Faraday.
- „ 21.—Christmas Smoking-concert. Chairman, Mr. A. R. Arrowsmith.

Irish Chemists' Assistants' Association.—The annual meeting was held at the Central Hotel, Dublin, on September 29, the Vice-President (Mr. M. O'Donnell, Ph.C.) in the chair. The Hon. Secretary (Mr. Bates) read the annual report, which was an able review of the work of the Association during the past year. Mention was made of the movement having for its object the recognition of the Pharmaceutical Society's Preliminary examination by the Apothecaries' Hall, half-holiday closing, and the Shops Bill. The financial position was not regarded as satisfactory, and it has been decided to surrender the Harcourt Street premises. The Irish Assistants' Benefit and Protective Association asked the Association to help in forming a Federation of Assistants, but the invitation was declined. The election of officers resulted as follows: *President*, Mr. M. O'Donnell, Ph.C.; *Vice-President*, Mr. Joseph Lynn; *Treasurer*, Mr. McManus; *Hon. Secretary*, Mr. Bates; *Committee*, Messrs. R. Smith, J. F. Rea, J. Meares, S. C. Brown, J. Robinson, A. B. Morrow, J. Marks, J. Moloney, and J. B. Coffey. The President then referred to the circumstances which have led to the exclusion of his name from the list of candidates for election to the Council of the Pharmaceutical Society, and promised that the incident would not be lost sight of.

Blackpool and Fylde Pharmacists' Association.—The first meeting of the winter session was held on October 2, when Mr. H. P. Withers presided. Mr. G. A. Clarke, who

has recently opened new premises in Whitegate Drive, Blackpool, was elected a member. The Hon. Secretary (Mr. D. J. Bailey) then gave a *résumé* of the steps the President and himself had taken during the recess in regard to the National Insurance Bill, and what was done the members approved of. The half-holiday on Wednesdays during the winter was fixed to commence on October 18, the hours of reopening in the evening to be from 6 p.m. to 8 p.m. It was also decided to close on the other nights in the week at 8 p.m., except Saturdays and Sundays, which were left optional. Mr. Withers then delivered his inaugural address. He considered it of the utmost importance that pharmacists should keep on the alert during the next few months, owing to the vital and far-reaching effects of the National Insurance Bill, which was in such a critical position and was receiving such strong opposition on the main clauses which affect pharmacists. He then drew attention to the new regulations regarding the sale of mineral acids, etc., which he considered were a very important and wise step to secure additional safety of the public. Mr. C. H. Turner was recommended for reappointment as Divisional Secretary, and the members accepted an invitation of the President to take supper with him after the next meeting in November.

Dewsbury Pharmacists' Association.—The monthly meeting was held on October 2, under the presidency of Councillor Barker (Heckmondwike). There were also present Messrs. R. Broadhead (Batley), W. Blakeley (Birstall), S. N. Pickard (Ossett), H. Jones (Morley), G. Walker (Birkenhead), J. Day (Savile Town), J. Rhodes (Mirfield), G. Butterfield, G. N. Gutteridge, R. Gledhill, and R. J. H. Day (Dewsbury). Mr. Broadhead read a paper on *Current Pharmaceutical Topics*, in the course of which he said the crying need of the present day was for men of principle—men who know what they want and will strive to get it. "The inconsistency and insincerity of partisans of the double-dealing policy of the Pharmaceutical Society are the result in a few cases of grasping self-interest, but in the great majority of cases they arise from puerile vanity and ignorance." What are required are men who have a grasp of the situation and are uninfluenced either by flattering compliments or discourteous abuse. He enquired not whether such men own hundreds of pharmacies, or whether they have only one "tin-pot shop" in which they wage a perpetual struggle to keep body and soul together: they are the only men whose views are worth considering, and such men are few and far between. Mr. Broadhead then referred to the effect of the Poisons and Pharmacy Act, and advocated territorial representation on the Council of the Pharmaceutical Society. A short discussion followed, and Mr. Broadhead was thanked for his paper.

Preston Chemists' Association.

The annual dinner of the above Association was held at the Bull and Royal Hotel on September 28. The Mayor of Preston (Mr. Alderman Miller, J.P.), who presided, was accompanied by the Mayoress and supported by Mr. C. B. Allen (President of the Pharmaceutical Society). Among the diners were Mr. and Mrs. Burnett, Mr. and Mrs. Williamson, Mr. and Mrs. Hindle, Mr. and Mrs. Livesey, Mr. Geo. Livesey, Mr. E. Topping, Mr. C. A. Arkle, Mr. Arkle (Lancaster), Mr. and Mrs. Walmsley, Mr. and Mrs. Mercer, Mr. and Mrs. Fisher, Mr. and Mrs. McGavin, Mr. and Mrs. Scanlan, Mr. and Miss Friedenthal, Mr. and Mrs. Parkinson, Mr. H. J. Freeman (Hon. Secretary) and Mrs. Freeman, Dr. and Mrs. Sykes, Dr. Healey, Dr. Hadfield; Messrs. Thomas, Armitage, Hadfield, Pomfret, Crompton, Gartside (Bamber Bridge), R. L. Gifford, Highton, Ashworth (Blackburn), Bailey and Boothroyd (Blackpool), Lewis (Evans), Walters (Potter & Clarke), Barnett (B. W. & Co.), Mrs. Barnett, and Miss Bannister. A substantial dinner was served. Then, the loyal toasts having been duly honoured, Mr. Burnett rose to comment upon the arduous nature of the work thrown upon the Hon. Secretary (Mr. H. J. Freeman) during the past six years, and presented him with a case of silver serviette rings, on behalf of the members of the Association.

The toast of "The Pharmaceutical Society" was proposed by Mr. W. F. Livesey, who said he thought that the Society ought to be more wrapped up in the prosperity of chemists. He questioned whether the Society had a definite policy, and he called for the trade to be taken into the Council's confidence. He congratulated the Council upon the way in which they had dealt with the National Insurance Bill.

Mr. C. B. Allen, in reply, said he thought that the presence of the President of the Pharmaceutical Society at dinner that night was a sufficient answer to Mr.

Livesey, and showed that there is some bond between the Society and local Associations. The Society's work needed no apology—educational, organising, examinations, and a category of other work occupying the Council two days each month. The Council is elected, and if members wish they can change its entire constitution in three years. The Society is very often in the position of "Auld Aunt Sally." In referring to local organisation, the President said Mr. Gifford had been advocating an Organising Secretary for years, and they had got very near that point by appointing Mr. Woolcock as Local Associations Officer. Associations are more in touch with the Society than ever they have been before. The history of the Parliamentary Fund was next dealt with in detail, and the President said if Mr. Glyn-Jones had been in the House of Commons when the Poisons and Pharmacy Act was passed, he did not think that licences would be granted haphazard, as now. If Mr. Glyn-Jones had not been a member of Parliament, what would have happened to pharmacists in regard to the National Insurance Bill? Even at present things are very chaotic, but pharmacists have got nearly all they asked for. This year, Mr. Allen said, the Council of the Pharmaceutical Society has been more active than they have ever been before. Mr. Lloyd George desired to separate prescribing and dispensing, but there was no phraseology in the Bill to secure this advantage, and the Council were determined to have it in the Bill. Continuing, he said the Society cannot put money into the pockets of individual pharmacists; the only thing they can do is anything that appears to be for the safety of the public. Pharmacists are badly protected. The Society recently took action against a person carrying on three businesses under three different trade names and exhibiting different certificates,

but such work does not make for the popularity of the Society. The President said that, although the action failed, he considered that it is upsetting the law to carry on different businesses under different trade names. To protect the place name "Pharmacy" required another new Act of Parliament, and Mr. Allen said it is likely chemists will see one if there is any chance to get one in during the present very busy time in Parliament. Vigilance is still necessary in regard to the National Insurance Bill, and pharmacists must be represented at the promised conference of the Chancellor of the Exchequer with friendly societies next month. Turning to the apprenticeship question, the President said that apprentices are not very well trained at the present time. The standard for the Preliminary examination, he had been informed, was too high, yet some 5,000 boys and girls yearly passed examinations of the required standard; but perhaps the long hours deter them entering pharmacy. Mr. Allen thought chemists could congratulate themselves upon such a capable pharmacist as Professor Greenish undertaking part of the editorship of the next British Pharmacopœia.

Mr. R. L. Gifford proposed the toast of "The Town and Trade of Preston," coupling the toast with the Mayor.

The Mayor, in his reply, said many new trades had been introduced through the dock scheme.

Mr. Burnett gave the toast of "The Visitors," which he coupled with the name of Mr. Allen, and Mr. Bailey (Blackpool) responded; while the toast of "The Medical Profession" was proposed by Mr. Williamson, to which Dr. Sykes replied.

Dr. Hadfield toasted "The Preston and District Chemists' Association," and Mr. Burnett (President of the Association) replied.



The Band that Won a Thousand Guineas Prize.

At the Crystal Palace on Saturday, September 30, hundreds of brass bands from all parts of the country gathered to compete for the championship of the United Kingdom, which carries with it the 1,000 guineas challenge trophy. After a very keen contest the judges (who listened behind screens, where they knew not which bands were playing) awarded the championship to Messrs. Joseph Crosfield & Sons' Per-

fection Soap Works Band, Warrington—a body of fine-looking men. This band has a remarkable record. During the eleven years it has been in existence, and since it began to compete in 1903, it has won seven first prizes, one second, two thirds, and two fourths. On Sunday, the band gave performances in the afternoon at the Palladium and in the evening at Tottenham Palace.

TRADE REPORT.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at the prices quoted here.

42 Cannon Street, London, E.C., October 5.

BUSINESS on the chemical and drug markets continues on a moderately active scale, and with few exceptions prices are fully maintained; in fact, it may be said that the values of many drugs are dear and much above normal. Consumers are evidently beginning to realise this fact, and are laying in stocks. The Turco-Italian war has not so far prejudiced trading to an appreciable extent, but c.i.f. business in the area affected is narrowed down, owing to the risks involved to shipping. This applies to Turkey opium to arrive, and if the trouble should spread, then it may have the effect of tightening spot stocks of the drug. Meanwhile the market is steady, but quiet, with small spot supplies of Turkey druggists' qualities. Persian has been in demand at high prices, but much of the spot stock has been withdrawn. Tripoli orange-peel is steady, there being fair spot stocks at the moment. The principal change in fine chemicals is an advance of 10*d.* per oz. in cocaine, which was anticipated. Both codeine and morphine remain firm. Hydrastin is dearer. Milk-sugar remains very scarce and prices nominal. Carbolic-acid crystals are firmer. Among heavy chemicals, contracts for bichromates are now being booked at unchanged rates. Arsenic and copper sulphate are easier. Among drugs, tolu balsam is again dearer, juniper-berries are firmer, and lycopodium cheaper, as is valerian-root. Senega is firm, and tragacanth continues active, with still higher rates anticipated. In the essential-oil group, star-anise is very firm and scarce, and Japanese peppermint is in more inquiry. Clove oil is steady. In miscellaneous articles, British grain spirit remains unchanged as yet, but the quality for methylation has been slightly advanced; this, however, will not affect the price of S.V.M. for this year. Quicksilver is cheaper by 2*s.* 6*d.* per bottle from first-hands. Shellac is quiet but steady, spot stocks being extremely large. Turpentine is easier, and cocoa-butter lower. The principal movements have been as under:—

Higher	Firmer	Easier	Lower
Benzols	Ammonia	Arsenic	Aloes (Cape)
Balsam Tolu	sulphate	Cod-liver-oil	Aloes
Capsicine	Canary seed	Copper	(Curaçao)
Caraway seeds	Carbolic acid	sulphate	Cocoa-butter
Cardamoms	Honey (Jam.)	Ipecacuanha	Lycopodium
Cocaine	Juniper-	(M.G.)	Quicksilver
Hydrastin	berries	Lemon oil	(official)
Tamarinds	Milk-sugar	(new crop)	
(W.I.)	Senna (Tinn.)	Valerian-root	
	Turneric		

Cablegram.

NEW YORK, October 5.—Business in drugs is of satisfactory volume. Opium is steady at \$8 per lb. for druggists' by case lots. Cascara sagrada is easier at 9½*c.* per lb. Senega is quiet at 36*c.* Peppermint oil is easier but quotably unaltered at \$2.95. Spearmint oil has advanced to \$4.25. Hydrastis is nominal at 55½*c.* Curaçao aloes is lower at 7½*c.* and milk-sugar is nominal at 15*c.* per lb.

Citric Materials.

In view of the firmer tendency in the market for citric acid, the following advice from the Continent is interesting: "As the price of citrate of lime remained unchanged since September last year, quotations for the manufactured product were until recently practically stationary. The upward movement of late is accounted for by the fact that the Camera Agrumaria has refused to make further sales of citrate of lime until the old orders it has on hand, running into several months to come, have been entirely worked off. As these orders have in the main been released against the selling contracts placed for the manufactured product, makers are obviously compelled to refrain from further sales, inasmuch as the statistical position is not calculated to prevent an advance in the cost of raw material. During last winter's frosts in Sicily the lemon-trees have suffered, whereby this year's crop has been materially curtailed, and it has proved by far insufficient to satisfy trade requirements. Thus a large portion of the old stocks could be disposed of. Next year, too, there is a possibility, if not a probability, of consumption running in excess of production, as the flowering of the trees has been so much jeopardised by frosts that the coming crop is expected to be once again below the normal. Should this crop be sold at its proper value, or on its merits, regardless of old warehouse stocks, the selling-prices of the Camera Agrumaria would probably be raised, and the latter has already lately advanced the quotation, on the basis of which it buys the new crop-product, from 130 lire to 135 lire for citrate (see *C. & D.*, September 30, index folio 67). The reserve-stocks of raw material having been much reduced, the Camera Agrumaria will no longer book contracts for delivery within a year, as it did last year, but it will have to restrict its sales to a certain number of months owing to the risks it would be exposed to by the booking of distant contracts through not being able to gauge beforehand what stocks of raw material it would have at its disposal, as receipts of same are an unknown quantity. The new contracts in citric acid will, therefore, presumably, in the future likewise be confined to near months, as exporters of raw materials, as well as the manufacturers of citric acid, are hardly in a position to proceed with sales without covering."

London Markets.

ALCOHOL.—At the meeting of the British distillers which took place last week it was decided to make no change in the price of grain spirit for the present, but a slight alteration was made in the price of spirit for methylation, which will not, however, affect consumers.

ALMONDS.—Market has now been cleared of Persian on the spot.

ANISE OIL, STAR, remains scarce on the spot at 5*s.* 3*d.*, and at the close 5*s.* 4*d.* has been paid on the spot; 4*s.* 6*d.* c.i.f. being asked to arrive.

ANISEED is very scarce on the spot; the quotation for shipment is 27*s.* 6*d.* per cwt. c.i.f. terms. Spanish is offered at from 32*s.* to 34*s.* c.i.f. to arrive.

ASAFOETIDA.—A few new lots of Persian Gulf are now being landed, and will shortly come to auction. If quality should prove good there will be a ready sale. The London stock of asafetida, according to the drug statistics, is returned at 1,083 packages, the largest for many years, but it consists of low and middling qualities, for which the demand is very slow.

BALSAM TOLU shows a further advance, the scarcity still being pronounced; one holder asks 1*s.* 10*d.* per lb.

BENZOLS are dearer, with prices nominal at 1*s.* to 1*s.* 1*d.* per gal. for 90 per cent., and 11*d.* for 50 per cent. in casks.

BERGAMOT OIL.—New season's crop is still offered at 20*s.* 10*d.* to 21*s.* per lb. c.i.f.

BICHROMATES.—The British makers announce that they are now able to book contracts for bichromates for delivery until the end of 1912. The quotation for *potash* crystals or granulated is 3½*d.*, and *soda* crystals or cake 3*d.* per lb.

CAJUPUT OIL.—The London Customs Bill of Entry reports an arrival of 100 cases, per *Perseus*, from Singapore.

CANARY-SEED is firm and tending dearer. Ordinary Morocco has been sold at 45*s.* per quarter c.i.f., and for good quality 48*s.* same terms is required.

CARAWAY-SEED is dearer owing to the prospect of a short crop next year. For shipment 29*s.* per cwt. f.o.b. Holland is asked, but there are re-sellers here at about 28*s.* per cwt. on the spot.

CARBOLIC ACID is firmer, English makers quoting on the basis of 7½*d.* per lb. for 40° detached crystals.

CASCARA SAGRADA.—A lot of 120 bags imported in 1907 was held at 42s. 6d., which price is also asked privately.

CHAMOMILES.—For finest white flowers 145s. is still asked, with No. 1 obtainable at 130s., No. 2 small flowers at 115s., and old crop at 110s. per cwt. c.i.f.

CINCHONA.—Supplementing last week's telegram in regard to the Amsterdam auction, we may add that 52,088 kilos. of quinine were sold, and 9,732 kilos. bought in. The average unit, which was 3.12 cents against 3.14c., is equal to the London parity of $\frac{2}{3}$ d. per lb. The approximate quantities of quinine purchased by the principal buyers was as follows: (1) The English and American factories, 15,555 kilos.; (2) the Brunswick factory, 6,507 kilos.; (3) the Mannheim factory, 9,740 kilos.; (4) the Amsterdam factory, 3,414 kilos.; (5) the Frankfurt and Stuttgart factories, 4,922 kilos.; (6) the Maarsse factory, 6,033 kilos.; and various buyers, 5,917 kilos. The prices paid for the manufacturing bark ranged from 9 $\frac{1}{2}$ c. to 31 $\frac{1}{2}$ c., and the druggists' bark from 6c. to 40c. per kilo. The 345 packages of coca leaves (with the exception of 7 bales bought in) sold at from 20c. to 74 $\frac{1}{2}$ c. per half kilo. In the London drug auction 11 serons fair broken, partly mossy, sound Loxa quill, sold at 1s. per lb. The shipments from Java during September were 1,772,000 Amst. lb. against 1,814,000 A. lb. in 1910, 2,016,000 A. lb. in 1909, and 1,114,000 A. lb. in 1908. During the first nine months of the year the exports were 12,300,000 A. lb. against 14,030,000 lb. last year, 11,681,000 A. lb. in 1909, and 11,576,000 lb. in 1908.

CITRIC ACID.—English makers do not appear to be offering, and in second-hands 1s. 5 $\frac{1}{2}$ d. is quoted. Foreign is offered at from 1s. 4 $\frac{3}{4}$ d. to 1s. 5d., according to holder; market is very steady.

CLOVE OIL.—The leading English distillers continue to quote from 4s. 8d. to 4s. 10d. per lb., the lower price being for 12 Wrs.; last week's quotation was an error.

CLOVES.—Flat. At auction 54 bales Zanzibar were bought in at 7 $\frac{3}{4}$ d. Privately, the market continues quiet, with sales to arrive of September-November at 5 $\frac{1}{2}$ d. to 5 $\frac{7}{8}$ d.; October-December delivery is nominally quoted 5 $\frac{7}{8}$ d.

COCAINE.—Last week's paragraph under this heading will have prepared our readers for the advance announced on Wednesday, which amounts to 10d. per oz., the quotation for 175-oz. lots of hydrochloride on contract being 8s. 9d. per oz., 75-oz. lots, 8s. 11d., and less than 75 oz. 9s. 1d., at which prices all orders have to be submitted to makers. It is pointed out that the price of crude cocaine is practically equal to the selling price of hydrochloride. Second-hands quote 8s. 5d. to 8s. 6d.

COCOA BUTTER.—At the Amsterdam auction 91 tons Van Houten's sold at 98.50 cents per half kilo., against 102.38c. last month.

COD-LIVER OIL.—There is practically no inquiry, agents continuing to offer from 114s. to 118s. per barrel c.i.f. for Norwegian non-freezing oil. Our Bergen correspondent writes on October 2 that the market remains quiet, prime non-congealing Norwegian oil offering at 116s. 6d. per barrel c.i.f. terms. The exports from the whole of Norway up to date amount to 26,100 barrels, against 25,100 barrels at the corresponding period of 1910.

COPPER SULPHATE is easier, ordinary Liverpool brands offering for prompt delivery at 18l. 17s. 6d. and spring at 19l. 10s. to 19l. 12s. 6d. per ton.

CREAM OF TARTAR is firm at last week's advance to 83s. per cwt. for 98 per cent., and 86s. for 95 per cent.

DIETHYL-BARBITURIC ACID has been reduced by 3s. 6d. per lb. to 24s. per lb. net.

ERGOT is firm and scarce, no Russian being obtainable on the spot under 4s. 6d. to 4s. 9d., and for October shipment 4s. 3d. c.i.f. is quoted. Spanish has been sold in small lots at 4s. 9d. on the spot, and nothing appears to be offered for shipment. In the drug auction a single bag of fair sound Russian of old crop sold at 4s. 3d. per lb.

GLUCOSE is firm, with liquid offering at 12s. 4 $\frac{1}{2}$ d. per cwt. ex-wharf duty paid.

HOPS.—The quality of English hops this season, judging from samples we have seen, show very fine quality; on the

other hand the foreign crop is poor, so that home growers are likely to do well. British export trade is brisk.

HYDRASTINE.—The makers announce an advance of 20s. per oz., the quotation for the alkaloid, the hydrochloride and sulphate salts being 85s. per oz. net. Hydrastina (resinoid) E.P.C. is also dearer at 85s., and yellow ditto at 12s. per oz. net.

JUNIPER BERRIES are firmer, selected offering from 13s. to 15s. per cwt. c.i.f. according to quality. *Juniper berry oil* (B.P.) has been advanced 3d. to 3s. per lb. net.

LEMON-OIL.—So far as regards new crop contracts, buyers continue to hold off. Some business for December-January shipment has been done at 5s. to 5s. 2d. per lb. c.i.f., and for prompt shipment from 6s. 4d. to 6s. 10 $\frac{1}{2}$ d. c.i.f. is quoted according to shipper.

A Palermo advice dated September 30 states that the market has again continued inactive, and although prices are unaltered, the tendency is easier, holders showing more inclination to sell. The position of new crop is also easier, as speculators are less inclined to buy forward. Consumers show a fair interest, and business has been done at somewhat lower figures than it was feasible in the previous week.

LINSEED.—As previously indicated, the prospects point to enhanced values. We learn that America continues a buyer on a large scale; South Africa has also bought largely.

LYCOPodium is easier, with treble-sifted quality of fining at 2s. 1 $\frac{1}{2}$ d. per lb. c.i.f.

MENTHOL is firm, with spot sales of Kobayashi at from 15s. 10 $\frac{1}{2}$ d. to 16s. per lb., with up to 16s. 3d. asked, according to holder. For outside brands further "bear" sales have been made at 13s. 6d. to 13s. 7 $\frac{1}{2}$ d. for January-March and 14s. 3d. to 14s. 4 $\frac{1}{2}$ d. for October-December.

The exports from Japan during July amounted to 8,506 kin, valued at 75,317 yen. The exports for the seven months ending July 1 were as follows:

		1909	1910	1911
Kin	...	50,666	61,206	65,412
Yen	...	236,516	317,294	484,690

MILK-SUGAR.—Further business has been done in American powdered at 62s. 6d. per cwt. on the spot, but further supplies from this source are wanting; and for shipment 65s. c.i.f. is quoted, which precludes business. German is quoted at 67s. 6d., which has been paid, and 70s. is asked at the close.

ORIUM is steady, but business this week is of a retail character, the quotation for 11 $\frac{1}{2}$ per cent. still being 24s. 6d. per lb. c.i.f. Sellers to arrive, however, are not anxious for business in view of the risks involved as a result of the Turco-Italian war. Should this be prolonged, it is probable that spot supplies of Turkey opium, which are very small, will appreciate further, but judging from letter advices received from Smyrna, shippers treat the warlike operations with indifference. At the moment the quotation for spot druggists' is 25s. 6d. per lb., London terms. New crop soft-shipping qualities is now available on the spot, and very high prices are asked. In Persian opium up to 26s. 6d. has been paid for 10 per cent., this being a further slight advance; the bulk of the stocks have been withdrawn. The *Anatolia* has brought 86 cases from Persia.

A Smyrna correspondent writes on September 22 that the sales this week amount to 49 cases old and new opium at 22s. 6d. to 26s. as to crop and quality, and one case extra fine new Yerli at 27s. It will be seen that sellers firmly adhere to full figures, and many of them do not even show any inclination to make progress, notwithstanding the present high rates. A little rain fell during the week in the lowlands, but a copious downpour all over the country is necessary to ensure the success of the early fall sowings. The arrivals in Smyrna amount to 690 cases, against 3,325 cases at the same date last year.

ORANGE-PEEL, one of the few articles of produce coming from Tripoli, so far remains unaffected in price, the value of fair strip on the spot being from 7d. to 8d. per lb. In the drug auction 10 cases very dark Tripoli strip were bought in at 8d. per lb.

OTTO OF ROSE remains unchanged, agents continuing to quote from 49s. 6d. to 60s. per English oz. Several of the Bulgarian shippers are now in London, one of whom declares there is very little pure otto now available.

PEPPERMINT OIL.—A fair business has been done in American H.G.H. at 15s. 6d. per lb. London terms, and sellers are inclined to ask 15s. 9d.; tin oil remains without change at from 12s. 6d. to 13s. net, as to brand, and for Japanese dementholised there has been more inquiry, with spot buyers of Kobayashi at 6s. 3d., and for Yazawa 6s. spot has been paid; for December-January shipment 5s. 6½d. c.i.f. has been paid for Suzuki. At the close a large business has been done in Suzuki at 5s. 7½d. for October-November and November-December, also January-March at 5s. 6d. c.i.f.

PETROLEUM.—A report has been current that the Standard Oil Co. has come to terms with the Asiatic Petroleum Co. in regard to the war of prices, but there appears to be no justification for the statement at present. Moreover, at a meeting of the directors of the Scottish Mineral Oil companies held in Glasgow to consider the question of fixing prices over the ensuing season, it was again found impossible to come to an agreement, the main obstacle being the keen foreign competition. The nominal prices are 5½d. to 5½d. for ordinary refined American, 6½d. to 6½d. for water-white, and 5½d. to 5½d. for Russian; but retailers have been able to buy at much below these prices for months past.

QUICKSILVER.—On Wednesday the chief importers reduced their price by 2s. 6d. per bottle to 8l. 10s., and in second-hands 8l. 7s. 6d. is quoted. Mercurials are unaltered.

QUININE.—Demand remains of a jobbing character. German sulphate offering from second-hands at 7d., Amsterdam at 6½d., and Java at 6½d. per oz. In the drug-auction 5 cases, each containing 100 1-oz. vials of Pelletier's brand, sold at 9d. per oz.

SAFFRON.—The previous prices of from 45s. to 46s. for the best qualities of Valencia are still maintained, with lower qualities, which also pass the B.P. test at 42s. 6d. to 43s. per lb.

SANTONIN.—In view of the shortage in worm seed, it is again asserted that the advance is not yet at an end.

SENEGA.—Firm. A fair quantity has been sold at 2s. 5l. per lb. net, and one holder now asks 2s. 6d.; it cannot be imported under 2s. 5d. c.i.f.

SHELLAC is dull, with fair T.N. orange on the spot offering at 66s. to 67s., and sellers of October-December shipment at 67s. c.i.f.

SPIRIT (METHYLATED).—The current quotations are: Industrial 61 o.p., 10 gallon and under 30, 2s. 1½d.; 30 gal. and under 100, 1s. 11½d.; 100 gal. and under 300, 1s. 10½d.; 300 gal. and under 1,000 gal., 1s. 9½d.; 64 o.p. is ½d. per gal. extra. *Mineralised*, 61 o.p., 10 gal. and under 30, 2s. 6½d.; 30 gal. and under 100, 2s. 4½d.; 100 gal. and under 300, 2s. 3½d.; 300 gal. and under 1,000, 2s. 3½d.; 64 o.p. is ½d. per gal. extra.

TARTARIC ACID is steady at 1s. 1d. to 1s. 1½d. for English and 1s. 0¾d. for foreign.

TRAGACANTH.—A considerable business has again been done, and orders are difficult to fill in view of the limited supplies on hand. Practically all descriptions have been dealt in, at full prices, and as very little is afloat, values for all grades are expected to advance further. The quotations are: Bagdad firsts, 16l.; seconds, 14l. 10s. to 15l. 10s.; thirds, 12l. to 13l. 10s.; and fourths, 8l. to 11l. per cwt. Although the drug statistics revealed a stock of 4,645 packages at the end of September, we learn that a considerable quantity of this has been sold, so that the figures are little guide to the actual position. A report has been current for some time past that an export duty of 10 per cent. is to be placed on tragacanth, but it wants confirmation.

TURMERIC is firmer for Madras, fair sales of finger having been made at up to 25s. per cwt. on the spot. Bengal is steady at 25s., and Cochin split bulbs at 15s. per cwt.

TURPENTINE OIL.—Whereas some weeks ago the tendency was distinctly upwards, with a moderate revival in the consuming demand and dealers inclined to book orders for next year's delivery, market conditions have lately been

rather dull and drooping, with renewed indifference on the part of consumers. One reason for this has undoubtedly been the freer accession of supplies from the U.S.A. Comparatively heavy quantities were shipped during September—an indication that the American receipts were larger than generally expected. The London warehouse stocks have been swelled very considerably, the total now being nearly 12,000 barrels in excess of a year ago, though still materially under the stocks which existed two years ago. Including the small quantity afloat, the London visible supply amounts to, roughly, 30,000 barrels, or 8,000 barrels more than last year. Current prices, all the same, are considered to be on a fairly healthy and reasonable basis, but turpentine being a highly speculative article, there is but little doubt that the situation has in no small degree been prejudiced by the severe depression in American financial circles, which, as usual, tends to divert attention from industrial enterprise. Until American financial affairs experience a decided turn for the better there is not much prospect of any material advance in the price. Meanwhile comparatively large deliveries are recorded of late, and should they continue at about the same rate over the next few months the reserve stocks would probably be substantially reduced. Russian spirit is now selling fairly well at about 30l. per ton, but there is no great eagerness to use substitutes in preference to the genuine American spirit when the latter is obtainable below 40l. per ton. This week the market has been easier, prompt delivery selling at 38s. to 38s. 1½d., the market closing at 37s. 9d. for American.

VALERIAN.—Last week's prices are easier to the extent of 5s. per cwt., new crop offering at 45s. c.i.f. terms.

London Drug-auctions.

First-hand drugs only were offered to-day, the demand for which was very fair. The quantity brought forward was small, however, and the sale was concluded shortly after noon. Cape aloes is arriving fairly free, and prices were 1s. to 1s. 6d. cheaper. Sumatra benzoin brought full prices, and Siam is now rather more plentiful. Cardamoms advanced 3d. to 4d. per lb., but seed was much dearer. Calumba is steady. Gamboge is quiet, and Jamaica honey firmer. Ipecacuanha is easier, but irregular prices were paid. Rhubarb was in demand, the bulk offering without reserve. No grey Jamaica sarsaparilla offered. Tinnevely senna excited good competition, and prices on average were 4l. per lb. dearer. West Indian tamarinds were firmer for good quality, and no interest was shown in beeswax. The following table shows the quantity of goods offered and sold:

Offered		Sold		Offered		Sold	
Aloes—				Gurjun balsam			
Cape	52	...	29	(drms.)	93	...	0
Socotrine (kegs) ..	30	...	0	Honey—			
Zanzibar	23	...	0	Jamaica	66	...	44
Anatto seed	20	...	0	N.Z.	107	...	0
Areca	85	...	0	Ipecacuanha—			
Bay leaves	16	...	0	Matto Grosso ..	10	...	6
Benzoin—				Lime-juice	11	...	0
Siam	7	...	1	Lime oil	6	...	2
Sumatra	84	...	60	Menthol	5	...	0
Birdlime	7	...	0	Myrrh	18	...	0
Buchu	17	...	1	Olibanum	51	...	5
Calumba	122	...	35	Orange-peel	10	...	0
Canella alba	3	...	3	Pareira brava ..	20	...	0
Cannabis indica ..	16	...	0	Quinine sulph.			
Cantharides (Ch.) ..	5	...	5	(1 oz. vials)	500	...	500
Cardamoms & seed ..	75	...	75	Rhubarb (China)...	29	...	29
Cascara sagrada ..	120	...	0	Sarsaparilla—			
Cascarilla	11	...	0	Honduras	5	...	0
Cassia fistula	30	...	0	Native Jam.	2	...	2
Cinchona	23	...	11	Seedlac	39	...	0
Cinnamon oil	7	...	0	Senna and pods—			
Civet (lms.)	5	...	0	Alex.	15	...	0
Coca-leaves	16	...	16	Tinnevely	324	...	281
Cubebs	90	...	0	Tamarinds	93	...	29
Cutch	5	...	0	Tragacanth	6	...	6
Cuttlefish-bone ..	61	...	1	Turmeric	300	...	0
D-agon's-blood	21	...	4	Wax (bees)—			
Ergot	1	...	1	Australian	1	...	1
Galbanum	2	...	2	Jamaica	1	...	1
Gamboge	12	...	1	Madagascar	326	...	0
Gum acacia	70	...	0	Morocco	24	...	0
				Wax, Japanese ..	40	...	40

ALOES.—Cape, the only description sold, was from 1s. to 1s. 6d. per cwt. cheaper, good bright hard firsts Mossel

Bay (20 per cent. tares) realising 33s. 6d. per cwt.; good seconds, 32s. 6d.; dull to dullish seconds, 30s. to 31s.; common soft and dull, 26s. to 29s.; very broken and drossy, 27s.; low, mixed with stones, 15s. per cwt. Of Zanzibar aloes 4 cases, including soft unsightly and low hard and sweepings, were bought in at 60s. Socotrine in kegs is worth from 70s. to 75s. for stiff pasty, as to quality.

ARECA.—Medium to bold clean Ceylon, a few wormy, were limited at 15s. per cwt.

BENZOIN.—Siam is now more plentiful, the offerings including 4 cases of small to bold free almonds of very fair flavour, for which 36l. per cwt. is wanted, but apparently no higher bid than 30l. was obtainable; a case of good pea and bean size sold at 26l., and for a case of good blocky siftings 15l. 10s. was refused. Sumatra was in demand, 60 cases readily selling at full-up prices, including ordinary seconds with false-packed ends at 6l. 7s. 6d., and fair to good thirds at from 5l. to 5l. 5s. per cwt.

BIRDLIME.—Seven cases fair Japanese were bought in at 1s. 4d. per lb.

BUCHU.—Quiet. Of 17 bales offered, 3 only consisted of round leaf, for which 4s. 6d. was wanted, the quality being rather stalky and slightly yellowish. A bale of common long leaf mixed with chopped stems sold at 1s. 4d.; ovals were limited at from 1s. 6d. for bronzy to 1s. 10d. for fair green.

CALUMBA.—Steady. Two bags of small to bold bright yellow washed sold at 27s. 6d. per cwt., 27 bags of fair rather stemmy native washed sorts realised 15s. to 17s. 6d. and six bags ordinary sorts, slightly country-damaged went at 13s. per cwt.

CANELLA ALBA.—Three bales of fair palish quill, part country-damaged, sold at 50s. per cwt.

CANNABIS INDICA.—Bombay tops are still held at from 5s. to 5s. 2d. per lb. as to seller; 6 cases had been sold privately. Marmagosa tops free from stalk were bought in at 5s. and siftings at 4s.; East African was not offered.

CANTHARIDES.—Five cases Chinese sold at 1s. 2d. per lb.

CARDAMOMS.—The much-reduced supplies met with good competition, and prices appreciated 3d. to 4d. per lb., but decorticated seed was much dearer. The prices paid were as follows:—Ceylon Mysore, good bold yellowish pale, 3s. 7d.; extra bold long silky dullish, 3s. 6d.; bold long yellowish pale, 3s. 3d. to 3s. 4d.; bold and medium ditto, 2s. 10d. to 3s. 1d.; duller ditto, 2s. 4d. to 2s. 5d.; small and medium, palish to pale, 2s. 6d. to 2s. 7d.; tiny pale, 2s. 3d.; pickings, small to boldish pale splits, 2s. 4d. to 2s. 6d.; seed, 2s. 8d. to 2s. 11d. Privately business had been done previous to auction at 2s. 5d. to 2s. 6d., but now 2s. 11d. is lowest.

COCA-LEAVES.—Two cases middling greenish Ceylon-Huanuco character sold at 9d., and 14 cases wild brown Ceylon-Truxillo character from India sold at 7½d., badly country damaged to slightly, going at from 3½d. to 6½d. per lb.

DRAGON'S-BLOOD.—Four cases common dull Singapore lump sold without reserve at 5l. 12s. 6d. per cwt., and 6 cases fair finger were bought in at 9l. 10s.; 11 cases of probably lump had not arrived in time. The arrivals comprise 11 cases per *Perseus*, also 13 cases per *Iyo Maru* from Singapore.

GALBANUM.—Two cases of this rare drug sold at 1s. 10d. per lb. for good clean quality.

GAMBOGE.—Of common Saigon pipe a single case sold at 35s. per cwt.; ordinary mixed Siam pipe, part dark and very blocky, was bought in at 11l.

GUM ACACIA.—In auction 70 bags half hard Soudan yellowish sorts were held at 57s. 6d. Practically all descriptions of Persian so-called insoluble sorts have now been cleared, the last sales being of ordinary Bushire at 25s. per cwt.

GURJUN BALSAM.—A lot of 98 drums from Bangkok was bought in at 3½d. per lb.

HONEY.—Jamaica was 1s. per cwt. dearer, the sales comprising fair amber liquid, in barrels, at 34s.; ordinary dark brown liquid to fair brown ditto, 28s. to 30s.; yellow set New Zealand was bought in at from 30s. to 35s. per cwt.

IPECACUANHA was about 2d. per lb. easier. Matto Grosso, the only description offered, selling at 8s. per lb. for fair, rather lean sound and ordinary woody at 7s. 10d.; but prices were irregular, as sea-damaged and country-damaged sold at from 7s. 9d. to 8s. per lb. These prices are decidedly below those asked privately during the week.

LIME OIL.—Of West Indian hand-pressed 20 bottles sold at from 5s. 5d. to 5s. 6d. per lb.; distilled in tins in cases was held at 1s. 3d. per lb.

MYRRH.—Eighteen packages common very blocky Aden sorts were retired at 52s. 6d. per cwt.

OLIBANUM.—Five cases fair palish drop sold at 46s. per cwt. subject; good drop was held at 50s., and fair siftings at 21s.

PAIREIRA BRAVA.—A direct shipment of 20 bags from Bahia was offered. The quality was fair, but as the drug has been off the market for months, the value was in doubt. A private bid of 60s. was refused, the lot being bought in at 5l. 10s.

RHUBARB.—The 29 cases catalogued all sold, owing to the fact that the bulk was offered without reserve, the parcel being more or less wormy. Bold round Shensi (High-dried character) with three-quarters palish pinky fracture sold at 2s., medium ditto at 1s. 8d., and pickings from the above at 1s. 1d. to 1s. 2d.; bold flat High-dried with three-quarters fair pinky fracture realised 9½d., and small and medium flat 8½d. per lb.; seven cases round Shensi from this parcel had been sold privately. Under usual conditions, two cases medium round Canton with three-quarters good fracture sold at 1s. 1d., and a case of bold flat Shensi (High-dried character) realised 9½d. per lb.

SARSAPARILLA.—Two bales of dullish red native Jamaica, all that offered, sold at 11½d. per lb. Privately both grey Jamaica and Lima-Jamaica are very scarce and wanted; for shipment, Mexican is quoted 7½d. per lb. c.i.f. London. Five serons fair Honduras were held at 1s. 3d. per lb.

SENNA.—Tinnevely met with keen competition, somewhat sensational prices being paid for a few outstanding lots, including 9d. for a bale of bold, but rather yellowish-green, leaf, and 6d. for medium and bold ditto; small and medium sold at from 3½d. to 3¾d.; small, 2¾d. to 3d.; small ordinary specky, 2½d. to 2¾d.; and small common specky, 1¾d. to 2d. per lb. Pods sold at from 1½d. to 2d. 15 bales of darkish Mecca pods were limited at from 5½d. to 5¾d.

TAMARINDS rather dearer for Barbados, 7 barrels darkish juicy of which sold at 16s., and for 22 packages from St. Thomas, 12s. was paid for dry and palish; 10 barrels dry Antigua were bought in at 11s., as were 48 casks fair black Calcutta at 13s. per cwt. No bid was obtainable for nine casks low E.I., although offered without reserve.

WAX (BEES').—Quiet and without change. A cask of fair, part dark Jamaica, all that offered, sold at 7l. 5s., and a case of ordinary brown Australian realised 7l. 15s.; 259 packages Madagascar were bought in at from 6l. 17s. 6d. to 7l. 2s. 6d. per cwt., according to quality.

Heavy Chemicals.

There is a very steady demand in the heavy-chemical market for both main and miscellaneous products for prompt, and there is also a considerable activity on forward account. Contracts in all departments are being steadily booked, and for the most part at present figures or slight advances. Shipments are good, particularly to northern ports.

ALKALI PRODUCE.—Bleaching-powder very firm; prompt at 4l. 15s. to 5l. for softwood casks, on rails; contracts on basis of 4l. 2s. 6d. to 4l. 7s. 6d. on rails, softwoods. Caustic soda, home trade, 76 to 77 per cent., 10l. 7s. 6d.; 70 per cent., 9l. 12s. 6d.; 60 per cent., 8l. 12s. 6d.; and export, 7s. 6d. per ton less. Ammonia alkali 58-per-cent. contracts, 4l. to 4l. 5s. per ton, in bags, on rails.

SULPHATE OF AMMONIA is rather on the quiet side, but the tone of values is firm, as prompt parcels offering are on the whole well absorbed. Present nearest figures: Beckton, prompt, 25-per-cent. ammonia guaranteed, 13l. 15s.; London terms, 13l. 7s. 6d.; Leith, 14l. 5s. to 14l. 7s. 6d.; Liverpool, 14l. 2s. 6d.; and Hull, 14l. to 14l. 2s. 6d.

BENZOLS are on the firm side, and there is a good demand for both early and forward delivery. As regards the former, however, there is really little obtainable, and figures are more or less nominal. Present naked figures: London, 90 per cent., 9d., and 50 per cent., 8½d.; North, respectively, 8¾d. and 8d.

TRADE-MARKS.

Objections to the registration of any of the undermentioned applications must be stated on Form T.M. No. 7 (obtainable at Money Order Offices for £1) and lodged with Mr. Temple Franks, Comptroller-General, Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned.

The figures in parentheses refer to the classes in which the marks are desired.

(From the "Trade-marks Journal," September 13, 1911.)

"SICRET"; for a preservative (42). By A. Boake, Roberts & Co., Ltd., 100 Carpenters Road, Stratford, Essex. 335,219.

"ASEPTOID"; for all goods (47 and 48). By Edward Cook & Co., Ltd., East London Soap-works, Bow, London, E. 335,350/1.

"BETOL"; for preparations for the teeth (48). By L. Pool & Zonen, 94 St. Anthoniesbreestraat, Amsterdam. 331,867.

"FAMA"; for preparations for the teeth (48). By A. Friedrich, Eusebius Binnensingel 14, Arnhem, Holland. 334,727.

"MOTHAR"; for tooth-powder (48). By John Lorimer, 4 Barton Terrace, Dawlish. 335,165.

(From the "Trade-marks Journal," September 20, 1911.)

"TOXOL"; for photographic developers (1). By Kino Film Co., Ltd., Birkesdorf, near Duren, 74 Juelichstrasse, Rheinland, Germany. 335,345.

"DISOL"; for disinfectants (2). By the Disol Chemical Co., 148 Old Street, London, E.C. 335,421.

"GIN PILLS FOR THE KIDNEYS" and label device; for pills (3). By the Bole Drug Co., Ltd., 70 Princess Street, Winnipeg, Manitoba, Canada. 332,352.

"LOMBODS"; for ointments, pills, and medicated soaps (3). By V.G.S. Syndicate, Ltd., 210 Capel House, New Broad Street, London, E.C. 332,341.

"VINTIS" and label device; for all goods (3). By The Vintis Co., 82 Bank Road, Bootle. 333,583.

"VIN-PHOSPH"; for a medicinal preparation (3). By Evans Sons Lescher & Webb, Ltd., 60 Bartholomew Close, London, E.C. 334,607.

"BENZOLYL"; for chemical substances (3). By Chemische Industrie Sieburg, Bernard & Schenck, Allestrasse 60, Sieburg, Germany. 334,898.

"THE ILOCINE OINTMENT"; for a medicinal preparation (3). By Thomas Marsh, 17 Keswick Road, St. Helens. 335,337.

Label device with Chinese figure and word "DIGESTIN"; for a medicinal preparation (3). By Yenjo Shoten, 7 Honcho Sanchoime, Nihonbashi-Ku, Tokyo. 335,491.

"LITTLE VICTOR"; for a medicated inhaler (3). By Cockburn & Co., Ltd., 130 to 140 Howard Street, Glasgow, Scotland. 335,011.

"HAPIO"; for medicines (3). By R. H. Waddell & Broughton, 5 Philip Lane, London Wall, London, E.C. 335,514.

"ALPHOMA"; for an ointment (3). By Wm. Teuton, 13 East Mayfield, Edinburgh. 335,527.

Label device with seascape and words "D. T. EVANS, MARGATE"; for medicines (3). By D. T. Evans, 1 High Street, Margate. 335,561.

Label device including words "CIMO LEMON SYRUP"; for lemon syrup (42). By Dr. Adolf Pfannenstiel & Maderholz, Schwanthalerstrasse 53, Munich, Germany. 334,184.

"ZOEGEN"; for a food (42). By John Bell, Hills & Lucas, Ltd., Oxford Works, Tower Bridge Road, London, S.E. 335,435.

"VALDA"; for pastilles, etc. (42). By Henry Canonne, 49 Rue Réaumur, Paris, France. 335,503.

"MIRRO"; for powder-coated leaves of paper (48). By Eli Marshall, 46-47 Colebrooke Row, Islington, London, N. 334,338.

Label device with words "LE CRÈME EMPOWL" and entwined letters; for a toilet-cream (48). By Emily Cohn, 79 Queen's Road, Bayswater, London, W. 335,050.

"AMBROSINE"; for all goods (48). Jane T. Kissack, 123 Coleherne Court, South Kensington, London, W. 335,386.

Letter "P" with two tooth-brushes crossed; for preparations for the teeth (48). By L. Pool & Zonen, 94 St. Anthoniesbreestraat, Amsterdam, Holland. 335,492.

"GARDEN WHISPERS," "ROSY MORN," and "SANS SOUCI"; for perfumery (48). By Yardley & Co., Ltd., 105 Carpenters Road, Stratford, London, E. 335,659, 335,663/4.



Memoranda for Correspondents.

All communications must be accompanied by the names and addresses of the writers, otherwise they cannot be dealt with. Queries by subscribers on dispensing, legal, and miscellaneous subjects connected with the business are replied to in these columns if they are considered to be of general interest.

Letters submitted for publication (if suitable) should be written on one side of the paper only. Their publication in "The Chemist and Druggist" does not imply Editorial agreement with the opinions expressed.

No Prosecutions Respecting Spirit of Nitre.

SIR.—The letter from Mr. Rushton on the above subject makes a suggestion that this article should be withdrawn from the operation of the Sale of Food and Drugs Acts. I am afraid this would not be possible in England. It is, however, important to emphasise two remarks which he makes—(1) that a standard can be legally enforced which it is impossible to maintain; (2) that the reputation and popularity of sweet spirit of nitre, both with the public and profession, for 150 years, has been secured and maintained by the satisfactory action of a product which never conformed to the standard now demanded. Does it not follow from this that this standard should be altered?

Yours truly,
T. D. V. (179/31.)

B.P. Test for Spt. Ammon. Arom.

SIR.—In the third report of the Committee of Reference in Pharmacy to the Pharmacopœia Committee of the General Medical Council I notice an apparent error, which if not corrected may cause trouble. Under the heading "Spiritus Ammoniae Aromaticus" it is stated:

"The barium-chloride test is unsatisfactory, and the following modification of it should be adopted: To 20 c.c. of the spirit add 5 gm. of ammonium chloride, agitate vigorously and add 16 c.c. of test solution of barium chloride. Warm to 70° C., cool to normal temperature, and filter. The filtrate should give a further precipitate on the addition of more barium-chloride solution and warming."

This test is obviously founded on the experiments made by Mr. F. C. J. Bird [v. C. & D., LVII. (1900), p. 176], but that author showed that when 20 c.c. of the spirit was taken and treated as described, no further precipitate was obtained, whereas with 21 c.c. there was a distinct precipitate on the further addition of barium chloride.

Yours faithfully,
Exeter, October 2. WIPPELL GADD.

Microscopy.

SIR.—It is probable many pharmacists possess a microscope, and that not a few attain proficiency in its use; but I believe there are others who lay the instrument aside after the first flush of enthusiasm and for want of an opportunity to learn the technique of preparing objects true to life, or obtaining the necessary insight to enable them to examine the wonders of Nature with an educated eye. I venture to indicate a source of instruction, which, as a beginner, I have found very helpful, in the hope it may appeal to others similarly situated. The Postal Microscopical Club was founded in 1904 for the purpose of bonding together those interested in microscopy as applied to the study of natural history. It is sufficiently broad to embrace everyone, from the skilled worker seeking companionship to the merest tyro searching for instruction, the latter being provided with a series of lessons in modern methods of mounting, etc. (covering two years' work), and graduating from the simplest exercises up to intricate work in staining and section-cutting. Slides contributed by members are in regular circulation, as well as manuscript journals for instruction, comparing of notes, and other information. A library of about seventy volumes, and those portions of a microscopist's outfit which are costly and only occasionally required (high-power objective, section-cutters, etc.), are at the service of members. The fees are graduated, a system of rebates

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being in force whereby the actual subscription paid by active members may be reduced to only half-a-crown each session. The Secretary is Mr. H. Edwards, 22 Carnarvon Road, Reading, who will gladly supply full particulars to inquirers; and I can cordially recommend the club as an inexpensive and instructive medium of intercourse to those pharmacists interested in microscopy.

I am, yours faithfully,

Winslow, Bucks, October 2.

R. A. EASTON.

Lin. Terebinth., B.P.

SIR,—Your correspondent, Mr. Wenmoth, is exultant because he has made two liniments, neither of which thickened on the completion of making. His first liniment was made with *sapo mollis* B.P., while the second was made from the commercial soap. He claims that his liniments are not thick and that they will not thicken on keeping, because they are made by his special process. He affirms, moreover, that excess of alkali in the *sapo mollis* is not responsible for any thickening which might occur immediately the liniment has been made, or after it has stood some time. Your correspondent, however, falls into a grave error; he did not analyse his soaps before he made his liniments to see if they exceeded the B.P. limits for excess of alkali. Now, had he titrated his soaps with standard acid solution and known to begin with what amount of free alkali was present in each sample, he would have been able to have decided whether thickening was due to excess of alkali or not. Because two liniments are thin when made does not prove what amount of free alkali is present. I expect if Mr. Wenmoth titrates his samples of soap he will find that these two particular samples fall within the B.P. limits for excess of alkali, and this is why his preparations are thin; if not, they will thicken on keeping. Mr. Wenmoth also tells us it is absurd for me to criticise the standard preparations of good wholesale houses. Not more absurd than for Mr. Wenmoth to criticise the processes in the B.P., which I doubt not were devised by far abler men than himself. He states that to add dilute hydrochloric acid to the liniment to neutralise excess of alkali is absurd. Why it is absurd your readers have yet to learn from Mr. Wenmoth.—Yours obediently,

EUGENE ARAM. (176/63.)

Oil and Spirit Drums.

SIR,—In reply to inquiries of "Meth. Spt." in your issue of September 30 I would like to give my experience *re* empties, and will answer the questions in the order put:

1. I have never known an instance of a maker insisting that empties should be returned within the term stated on invoice.

2. The answer is in the affirmative.

3. Yes. Empties are always credited in full whenever returned, always provided they are in sound condition.

4. It is the custom to charge for containers at nearly double their value, but the buyer has the option, should he not wish to return the empties, to deduct half the price charged, which brings the price to about their value. This is almost a hard-and-fast rule, there being only one or two houses in a considerable number of accounts who object to this being done. I think your correspondent is being harshly treated by the firm he bought from. It is evident they want to do no more business with him. I think that, should the firm refuse to accept the empties, which is not reasonable, your correspondent should sit tight and refuse to pay more than half price charged—*i.e.*, the actual cost of the empties.

Yours truly,

Cork, October 2.

EDWARD T. ELMES, Ph.C.

SIR,—It is, I believe, a general custom to charge packages for oils and spirits at the rate of 1s. per gal., as being a very convenient basis, not that the packages are worth that, especially when well worn, and if the package is kept definitely to make an allowance according to condition. But if your correspondent had paid the amount charged for the packages, he would still have been entitled to have the full amount credited to him when he did return the same. I do not think he can say the wholesaler is ungenerous in his treatment when he is allowed three full months' use of the packages. Empty packages are the cause of more friction between buyer and seller than any other item, and it needs a

spirit of moderation and give-and-take on each side to avoid disputes. The cost, wear-and-tear, cleansing, etc., of packages is a very serious item in the running expenses of a big house; and from a long experience I am compelled to say that many retailers are extremely careless in the care of returnable packages and treat them with but scant care. Bright tin drums are too often left in exposed situations and arrive practically ruined. After three months' use I think your correspondent should pay invoice charge for same and have it allowed when the empties are returned in good condition. Wholesale houses often suffer in silence rather than offend a good customer, but we should be fair all round.

WM. BOUSFIELD.

Extract of Indian Hemp.

(Translation.)

SIR,—I have read with interest the article [by Mr. Harold Deane, B.Sc.] with reference to extract of Indian hemp (*C. & D.*, July 29, p. 207), and take the liberty of making the following remarks, for which I ask the hospitality of your pages.

As there can be no doubt whatever that the efficacious components of Indian hemp are contained in the resin, and as it has been proved that almost all the saleable extracts contain a certain percentage of oil which proceeds from the seed, it would be more practical and scientific to manufacture the cannabis extract from the resin. This resin, which is known under the name of "haschisch," is produced in large quantities in Greece. It is little known that from 5,000,000 to 6,000,000 kilos. of Indian hemp is cultivated here yearly, which is practically exclusively dealt with for the haschisch. The Indian hemp in this country is unusually rich in resin, and far exceeds in yield and quality supplies received from Zanzibar, Madagascar, etc. Haschisch is obtained in Greece by a complicated process of rubbing the dry leaves and shifting off the resin clinging to the leaves. It contains about 50 per cent. of substance soluble in alcohol and 58 per cent. of substance soluble in ether, as it is impossible under the process employed to prevent the presence of impurities in shape of earth and vegetable matter. Warmed and pressed haschisch forms a firm substance. From the consistency, the conditions of solubility, and if necessary by microscopic examination, there is no difficulty in determining the purity of the product.

In my opinion it would be in every respect advisable to manufacture the extract from haschisch, as an extract of uniform quality would thus be obtained. Here in Greece it is possible that the yield of the plants in regard to resin may vary from year to year (from 4 to 6 per cent.); the resin, however, will continue of uniform quality. I am willing to give any further information that may be desired.

Piræus, Greece, September 25.

CHR. GREEN.

Are Examinations Needed?

SIR,—The stringent Preliminary may have been intended to keep half-taught lads out of the business, as Mr. Spencer Turner states, but I think it does a good deal more than that. It tends to discourage many other lads also who consider that a business which requires such inordinately long hours, which allows so little time for mental or physical recreation, and which shows so little prospect for the future, is not worth the trouble of passing a preliminary. Lads who are able to pass a "stringent preliminary" are usually anxious to do better for themselves than entering a business in which the blanks are so many and the prizes so few. What is the result? Half-taught lads are taken because the other kind cannot be got, and thus the stringent Preliminary encourages the very thing it is intended to discourage, for these half-taught lads inevitably drift into the army of the unqualified, from which they will never emerge. Far be it from me to utter one disparaging word of Mr. Turner's altruistic philosophy, which I admire; if every chemist on the Register held similar views it would be the better for all concerned. Unfortunately it is too late now to preach this doctrine to most of us, who could not, if we would, turn back the hands of the clock. By the way, why does Mr. Turner misquote the old Latin tag, "*Facilis est*

descensus Averno"? Avernus is a lake, and not a mountain. It has come to mean "the pit," or (politely) Hades; easy is the descent to the lower regions.

Yours truly,

PH. CHEM. (176/90.)

An Explanation.

SIR,—With reference to a communication published in your issue of September 30 from Mr. W. S. Glyn-Jones, Secretary of the Proprietary Articles Trade Association, stating that one of our representatives had been visiting chemists in different districts and obtaining orders by misrepresenting our firm to be members of the P.A.T.A., we beg to state that those who volunteered the information and made those statements were in error, but not culpably so. At the time when London chemists were being visited by our representatives, we were introducing customers to Messrs. H. Grube, Ltd., 12A Paternoster Row, E.C., who were then acting as our wholesale agents. Messrs. H. Grube, Ltd., are members of the S.P.A.T.A., and they had instructions from us to put our article on the P.A.T.A. list. They assured us that it would be a wise thing to do, and on the strength of this understanding our representatives no doubt in some instances led our customers to believe that before long the article would be, if not already so, on the P.A.T.A. list. Messrs. H. Grube, Ltd., have now ceased to act as our wholesale agents; but we take this opportunity of assuring all concerned that our article will in January 1912 be on the P.A.T.A. list. We shall in due course make our application for membership. During the last month (September) all sales that were made have been made only under an agreement that the advertised retail price would be adhered to unconditionally.

Yours faithfully,

Southend-on-Sea.

BROWN & CO.

Legal Queries.

Consult the Legal Advice Section of "The Chemists' and Druggists' Diary," 1911, p. 435, before writing about your difficulty.

Inquirer (196/24).—(1) Grocers, drysalts, and others who sell mineral acids and other poisonous substances covered by Section 5 of the Poisons and Pharmacy Act, 1908, must conform to the regulations precisely in the same manner as chemists. (2) Salt of sorrel and salt of lemon sold in powder form do not require to be placed in a bottle or other container distinguishable by touch. It is only when they are liquid that this must be done.

Rad. Tarax. (178/61).—Apprenticeship is not a condition of entry for the Minor examination, but the Pharmaceutical Society requires a declaration that the applicant has been for three years engaged in the dispensing of medical prescriptions. If these three years have been spent in the employ of a limited company, it is necessary that the declaration should be attested by a registered chemist and druggist or registered medical practitioner.

Phenol (177/32).—Your preparation is made liable to medicine-stamp duty by the wording on the label, which states that it is "the unrivalled remedy for influenza, colds, etc." The words that you propose to add will not bring the preparation within the exemption as to "known, admitted, and approved remedies." If you send us the formula for publication in the *C. & D. Diary*, 1912, that fact stated on the label would secure exemption, or you may mention on the label the active ingredients of the mixture.

Vulpus (176/80).—(1) There is neither statutory nor official basis for the statement that "the wording on labels for 'poisonous substances' should be printed in blue on a white ground." It is not legally necessary even, as explained in the reply to "Alpha" (*C. & D.*, September 30, index folio 525), to have the labels printed; they may be hand-written or type-written, so long as the substances are labelled in conformity with the Act. (2) Statements contained in the journal which you refer to are not necessarily "official."

5313 *N. M.* (178/52).—The ammonia regulation, which comes into force on February 1, 1912, applies to "liquid preparations containing more than 5 per cent. by weight of free ammonia." It is clear from this that any liquid preparation whatsoever, and however made, which contains free ammonia in the stated quantity must be labelled with the name of the substance, the words "Poisonous" and "Not to be taken," and the name and address of the seller. Also such preparations may only be sold or delivered in bottles distinguishable by touch from ordinary bottles.

J. B. (196/23).—(1) As to the sale of spirits of salt in gallon and half-gallon quantities in stone jars and Winchester quart bottles, we cannot add to what was stated in reply to "F. M." in our issue of September 30, index folio 525. We can only reiterate that retail vendors keeping open shop as such should not send out the acid unless in containers distinguishable by touch from ordinary containers. (2) Easton's syrup and Fellows's syrup contain less than 0.2 per cent. of strychnine, and are in consequence in Part 2 of the Poisons Schedule, and sales do not require to be entered in the poisons-book.

T. F. (177/39).—The bottles "distinguishable by touch" for solution of ammonia will not be required until February 1, 1912. The regulation made in respect to the bottles for it and the mineral acids does not prescribe the colour of the glass to be used in making the bottles, nor does it require that any lettering should be blown into the bottles. It simply states that they must be distinguishable by touch from ordinary bottles. Hexagon shape would be suitable, that shape being associated usually with substances which are not to be taken internally; but there is no reason why they should not be oval, flat, or round, provided the surface is ribbed or otherwise marked so as to be distinguishable by touch. If it is desired to put lettering upon bottles for liquid ammonia or mineral acids, the word "Poisonous" should be used in preference to "Poison," but the legal obligation is to put the words "Poisonous" and "Not to be taken" upon the labels, along with the name of the substance and the name and address of the seller.

Wales (177/20).—(1) Spirits of nitre, Friar's balsam, and other medicinal preparations containing more than 3 per cent. of proof spirit are regarded by the Revenue Authorities in this country as being spirits saleable only by those who are licensed to retail spirits; but by the Act of 1742-3, physicians, apothecaries, surgeons, and chemists are exempted as to any spirits or spirituous liquors which they may use in the preparation or making-up of medicines for sick, lame, or distempered persons only (see *C. & D. Diary*, p. 455, for full particulars). (2) This question is not quite clear, namely: "Is it necessary that a qualified man must have a pecuniary interest in a private limited company carried on as a chemist's business?" If a limited company uses such titles as "Chemists and Druggists," "Cash Chemists," "Store Chemists," etc., a shareholder of the company who is a registered chemist and druggist must be a director of the company and superintendent of its business. If a limited company do not use the titles, these formalities are not required; but every premises in which it carries on business as chemists must be *bona fide* conducted by a registered chemist and druggist, and the business as a whole must be under the control and management of a superintendent who is a registered chemist and druggist. (3) It is not necessary to state on the labels or wrappers of legal poisons that they are "labelled Poison in accordance with the Pharmacy Acts." The name of the article, the word "Poison," and the name and address of the seller are required. The phrase which you quote was introduced in 1869, as an explanation why such preparations as paregoric were labelled "Poison."

Miscellaneous Inquiries.

We do not as a rule repeat information given in this section during the past twelve months. When references are given to past issues, these should be consulted. Back numbers for the past five years can generally be obtained from our office at the published prices. We do not undertake to analyse and report upon proprietary articles.

J. W. C. (170/29).—The following is Mr. A. H. Bennett's hydroxylamine process for the ESTIMATION OF CITRAL as published in "The Analyst," 1909, p. 14:

Twenty c.c. of lemon oil is mixed with 20 c.c. of a N/2 solution of hydroxylamine hydrochloride in 80-per-cent. alcohol, and to the mixture is added about 8 c.c. of N/1 alcoholic potash and 20 c.c. of strong alcohol (which is sufficient to procure complete solution when hot). The mixture is boiled gently under a reflux condenser for half an hour, and then allowed to cool. The condenser is washed down, and the contents of the flask diluted with about 250 c.c. of water, and neutralised to phenolphthalein. The liquid is then titrated with N/2 sulphuric acid, using methyl orange as indicator. The number of c.c. of acid required, subtracted from the number used in a blank experiment, in which no lemon oil is present, gives the amount of hydroxylamine which has entered into reaction with the citral, and multiplied by 0.076 gives the weight of citral.

When the titration to methyl orange is performed in the usual way with addition of a drop of the indicator to the solution, the end point is often not very satisfactory. Much sharper results are obtained by making use of drops of a

very dilute aqueous solution of methyl orange scattered on a white plate. When drops of the solution which is being titrated are brought into contact with these the change of colour when neutralisation is complete is well marked.

B. S. R. (178/30).—ANTIFORMIN is a special solution of chlorinated soda made by Oscar Kuhn, of Berlin. A 10-per-cent. solution of it in water, to be used as a hair-wash, cannot be harmful, but we have not heard of its use in the treatment of baldness.

A. R. B. (167/1).—LIQUID METAL-POLISH.—As a suspending ingredient for the powders in liquid metal-polish you might try gelatin in the proportion of 5ijj.-3iv. per pint. This needs the addition of water to the liquid. The length of time the kieselguhr remains in suspension depends upon the basis employed; where light liquids such as benzine are used the powder soon sinks, but with a mixture of raw oleic acid (9) and paraffin (1) the creamy form is retained for a long time.

B. & F. (167/23).—MILK DRIBBLING IN COWS.—Colloidion is painted on the teats of cows to prevent milk dribbling. You do not tell us the composition of your speciality of which you send us a sample, but we judge it to be of the nature of colloidion. The complaint that your compound does not act after a few times is no doubt due to the evaporation of the solvent. There is no way of preventing this except by paying great attention to the stoppering of the containers.

A. & Co. (161/52).—INFANTS' MALTED FOOD.—The following formulæ illustrate the popular types:

1. Baked flour ... 16 oz.	2. Milk-powder ... 16 oz.
Biscuit-powder ... 16 oz.	Milk-sugar ... 4 oz.
Powdered malt ... 4 oz.	Malted flour ... 4 oz.
Milk-sugar ... 4 oz.	Cane-sugar ... 2 oz.
Cane-sugar ... 2 oz.	

A good deal of information on the subject of infants' and invalids' food is given in "Pharmaceutical Formulas," a new edition of which is in the press.

R. N. L. (164/64).—There is no book published especially on confectionery colouring-matter.

C. S. S. M. (167/65).—WHITE PAINT FOR SHOWCARDS.—Mr. Marfit (*C. & D.*, January 29, 1910, p. 169) employs zinc oxide ground with a little mucilage to a very smooth paste. If too much gum is used the gum is apt to come to the surface and spoil the appearance. A little plumbi carb. may be added to increase the opacity. The cracking of the paint on lettering which has been done for some time is partly counteracted by adding a trace of glycerin, but the defect cannot be entirely prevented if the showcards are exposed to the sun for a long time.

J. H. W. (147/68).—(1) QUANTITATIVE DETERMINATION OF CREATININ AND CREATIN IN URINE.—Several processes may be adopted for the estimation of these two substances. They may be separated from the urine as zinc or silver salts, but for clinical purposes such methods present serious difficulties. The length of time required and the trouble involved render them inapplicable for ordinary use. Another process is, however, available, which, while it has defects, can be quickly applied, and in the hands of the same operator yields good comparative results. This process is based on Jaffe's test, which depends upon the deep red colour produced when creatinin is acted upon by picric acid and caustic soda. A standard colour solution is readily prepared by making a semi-normal solution of potassium bichromate. This has been found to equal in depth of colour a solution of creatinin, to which the test has been applied, equal to 8.1 mgrms. in 500 c.c. To perform the test take 10 c.c. of urine, add to it 15 c.c. of a 1.2-per-cent. solution of picric acid and 5 c.c. of a 10-per-cent. solution of sodium hydrate, mix well, and allow them to stand for five minutes. At the end of this time, when the reaction is complete, pour the mixture into a 500-c.c. flask, rinse out the vessel, add the rinsings to the flask, and make up with water to the 500-c.c. mark. A comparison has now to be made with the standard solution. If a colorimeter is not available, it may be done in Nessler tubes. Pour 50 c.c. of the standard bichromate into one tube and a sufficient quantity of the test solution to exactly match the colour into another tube, of course comparing them by looking vertically downwards through the column of yellow fluid on to a white tile held at about 45° to a good light. The calculation is simple. Measure the number of c.c. required, x , and $\frac{50}{x} \times 8.1$ = number of mgrms. of creatinin in the 10 c.c. of urine taken, and a rule-of-three sum supplies the quantity for the day. It is desirable that the two colours should approximate to one another; consequently, if there is much difference—say, less than half or more than double—start afresh, using 5 c.c. or 20 c.c. of the urine as the case may require. To estimate the creatin it is necessary to repeat

this process upon a fresh 10 c.c. of the sample after it has been first heated for about three hours on a water-bath with 10 c.c. of normal hydrochloric acid. The effect of the prolonged boiling is to convert the creatin into creatinin. The difference of the reading of the first experiment and the second indicates the amount of new creatinin that has been formed. As 1 of creatinin is equal to 1.16 of creatin, the difference multiplied by 1.16 will give the quantity of creatin in the original sample. Some practice is required in nice judgment of colours, and it appears that temperature also affects the reactions. It is desirable, therefore, that similar conditions of light and temperature should be obtained if possible. (2) QUANTITATIVE DETERMINATION OF ACETONE IN URINE.—Probably the best method to adopt is Lieben's test as modified by Messenger. It depends upon the formation of iodoform when iodine is added to an alkaline solution of acetone. 100 c.c. of the sample is taken, acidified with acetic acid, and distilled until about 50 c.c. is collected, great care being taken to prevent any loss of the very volatile acetone. The distillate is now acidified with sulphuric acid and redistilled. This second distillate is now treated with 20 c.c. of N/10 iodine solution and sufficient strong solution of sodium hydrate to discharge all the colour. Five or ten minutes is allowed to elapse for the iodoform to precipitate, then the unused iodine is liberated by the careful addition of excess of hydrochloric acid. The solution is now brown from free iodine, which is estimated by running in from a burette N/10 solution of sodium hyposulphite. In order to make the end reaction more sharp a little starch solution is added when the brown has become pale yellow, and the disappearance of the blue produced by the free iodine and the starch indicates the end of the process. The number of c.c. of hyposulphite used deducted from 20 is the number of c.c. of standard iodine used, and this number multiplied by 0.967 equals the number of mgrms. of acetone in the 100 c.c. of urine taken, 1 c.c. of N/10 iodine being equal to 0.967 mgrms. of acetone. It is well to remember that acetone has a low boiling-point, and that in the distillation in warm weather iced water round the receiver is desirable. The double distilling is in order to arrest other volatile ingredients which might otherwise pass over into the distillate. This process does not discriminate between diacetic acid and acetone, but includes both, the diacetic acid being converted into acetone in the still.

G. W. S. (166/48).—TOMATO-SAUCE.—A recipe for this was given in the *C. & D.*, February 18, index folio 269.

Exemption from Medicine Stamp-duty.

We propose to reserve in *The Chemists' and Druggists' Diary* for 1912 a limited amount of space for subscribers' formulas for known, admitted, and approved remedies. Our *Diary* was the first publication of the kind approved by the authorities for this purpose. Each formula (with dose in the case of internal medicine) should be written on a piece of paper by itself. Early despatch to the Editor of the *C. & D.* is desirable.

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," October 15, 1861.

Effervescing Carbonate of Iron.

In the last number of the *Chemist and Druggist* we noticed some very well made effervescing Chalybeates. As some of our readers are anxious to know the exact mode of forming these elegant aperients, we insert Dr. T. Skinner's formula for this preparation.

R. Acid. Tart., 5ijj
Sod. Bicarb., 3v
Ferri Sulphas., 5x
Pulv. Sacch. Alb., 3i 5vi
Acid. Citric, 5ij.

First. Mix the sulphate of iron with the sugar, and part of the tartaric acid.

Secondly. Mix the citric acid with remainder of the tartaric acid, and bicarbonate.

Thirdly. Stir the two mixtures together, and thoroughly unite them by sifting.

Lastly. Put the whole into an open metal vessel in a water bath, and stir until it is well granulated. In these proportions there are ten grains of sulphate of iron in every drachm and a half; this will produce, by double decomposition, four grains of pure protocarbonate of iron.

It is almost needless to observe that the materials employed should be finely powdered, very dry, and that the preparation should be kept from the air and moisture by being preserved in well-stopped bottles.

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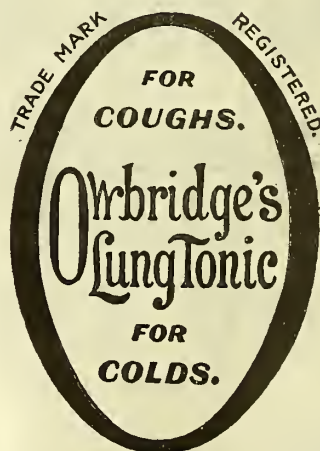
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- Acid.** Acetylo-Salicyl, 56 lbs. @ 2/4 lb.; 7 lbs. @ 2/7 lb.; 1 lb. @ 2/9 lb.
- "** Boric Pulv., 3 cwt. @ 28/- cwt.; 1 cwt. @ 28/6 cwt.; leviged. 3/- cwt. or 1/4 lb. extra.
- "** Carb. Xtls., 39/40; 2 1/2 cwt. Drums @ 54d. lb.; 56 lbs. @ 54d. lb.; 10 lb. Tins @ 6/- each; 36 1-lb. Bots. 9d. lb.; Single Bots. 11d. lb.; Detached Cryst. 10 lb. Tins @ 7/6 each, 1 lb. @ 1/2 lb.; Crude Black, 45 Gall. casks @ 1/- gall.; 5 Gall. Drums @ 1/4 Gall.; 1 Gall. Tins @ 1/6 each.
- Salicylic pulv., 7 lb. @ 1/1 lb.; physpur. 1 lb. @ 3/- lb.
- Acid Diethylbarbituric**, 16 oz. @ 26/- lb.; 1 oz. @ 2/1 oz. [1/10] lb.
- Ammon. Brom.**, P.B., 1 cwt. @ 1/8 1/2 lb.; 7 lbs. Ammon. Carb. lump, 3 cwt. @ 34d. lb.; 28 lbs. @ 44d. lb.; 7 lbs. @ 5d. lb.; powder, 1/4 lb., extra.
- Amyli Pulv.**, 10 cwt. @ 11/6 cwt.; 2 1/2 cwt. @ 12/- cwt.; 1 cwt. @ 14/- cwt.
- *Aqua Anethi Conc.** 1-40, 1 lb. @ 2/11 lb.
- "** Anisi Conc. 1-40, 1 lb. @ 3/1 lb.
- "** Cinnam. Conc. 1-40, 1 lb. @ 3/4 lb.
- "** Aurant. Trip., 53 lbs. for 17/6; 6 lbs. @ 7d. lb.
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- "** Rosæ Trip., 53 lbs. for 20/-; 6 lbs. @ 7d.
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- "** Samb. Trip., 53 lbs. for 23/6; 6 lbs. @ 8d. lb.
- "** Samb. Conc., 1-40, 1 lb. @ 6/1 lb.
- "** Laurocerasi, 53 lbs. for 20/-; 6 lbs. @ 7d. lb.
- "** Nith. Pip. Conc., 1-40, 1 lb. @ 3/- lb.
- Argent. Nit.**, 6's to oz., 25 oz. @ 1/7 oz.; 1 oz. @ 1/10 oz.
- Argent. Nit.**, Cryst., 25 oz. @ 1/6 oz.; 8 oz. @ 1/7 1/2 oz.
- B**ismuth, P.B., Carb., 7 lbs. @ 8/10 lb.; 3 lbs. @ 9/1 lb.; 1 lb. @ 9/3 lb.; subnit., 1/- lb. less.
- C**amphor, English Flowers, "not artificial", 5 lbs. @ 2/- lb.; 7 lb. Tabs. 1/2 oz., 1/4 oz., 1 oz. @ 2/- lb.; Crude, about 92% as imported, 140 lbs. @ 1/7 lb.; 28 lbs. @ 1/8 lb.
- Cocaine Hydrochlor. B.P., 25 ozs. @ 8/6 oz.; 4 ozs. @ 9/- oz.; 1 oz. @ 9/5 oz.
- Codeina, 1 oz. @ 18/5 oz.; Phosph., 1 oz. @ 16/9 oz.; Hydrochlor or Sulph. 1 oz. @ 17/7 oz.
- Cream of Tartar, 98% powder, 1 cwt. @ 91/- cwt.; 7 lbs. @ 104d. lb.
- *Dec** Aloes Co. Conc. 1-2, 6 lbs. @ 2/9 lb. Sincroco, 6 lbs. @ 1/2 lb.
- *Dec** Cinchonæ (Rubræ) Conc. 1-7, 6 lbs. @ 1/10 [lb.]
- *Dec** Senegæ Conc., 6 lbs. @ 2/1 lb.
- E**mulso Oli. Morrhuæ, 10 lbs. @ 9d. lb.
- "** Ext., Opil Solid, P.B., 1 lb. @ 49/- lb.
- Ess** Bergam (Oil), 12 lbs. @ 18/- lb.; 1 lb. @ 19/- lb.; not guaranteed absolutely pure.
- Ess** Limonis (oil) original coppers, 12 lbs. @ 4/6 lb.; 6 1-lb. bots. @ 4/9 lb.; not guaranteed absolutely pure.
- *Ess** Moschi (not artificial), 5 lbs. @ 10/3 lb.; 1 lb. @ 11/3 lb.
- *Ess** Pear (artificial), Jargonelle 5 lbs. @ 1/6 lb.; Bergamot, 2/6 lb.
- "** Pineapple, 5 lbs. @ 3/4 lb. [lb.]
- "** Raspberry 5 lbs. @ 2/2 lb.; 1 lb. @ 2/6
- "** Vanilla Beans, 5 lb. @ 4/4 lb.; 1 lb. @ 4/7 lb.
- Ext.** Belladonnæ Liq., B.P., 5 lbs. @ 4/3 lb.; 1 lb. @ 4/8 lb.; solid, 7 lbs. @ 2/10 lb.
- Ext.** Cascara Sag. Liq., B.P., 1 cwt. @ 1/0 1/2 lb.; 10 lbs. @ 1/2 lb.
- *Ext.** Ergot. Liq. P.B., 5 lbs. @ 6/9 lb.; 1 lb. @ 7/3 lb.; Solid P.B., 4 lbs. @ 37/6 lb.; 1 lb. @ 38/6 lb.
- Ext.** Filicis Liq., P.B., 9 lbs. @ 4/10 lb.; 1 lb. @ 5/11 lb.
- Ext.** Gent., P.B., Solid, 1 cwt. @ 9 1/2 lb.; 7 lbs. @ 10 1/2 lb.
- *Ext.** Glycyrrh. Liq., B.P., 6 lbs. @ 1/4 1/2 lb.
- "** Hamamelis, Liq., P.B., 5 lbs. @ 3/5 lb.
- Ext.** Hyoscyan. Solid, B.P., 3 lbs. @ 4/9 lb.; 1 lb. @ 5/1 lb.
- Ext.** Malti c. Ol. Jecoris, 10 lbs. @ 5 1/2 lb.
- *Ext.** Nucis Vom., Liq., P.B., 5 lbs. @ 3/- lb.; 1 lb. @ 3/3 lb.; solid, 5 lbs. @ 2/9 lb.; 1 lb. @ 3/- lb.
- F**erri Ammon. Cit., P.B., 28 lbs. @ 1/5 lb.; 7 lbs. @ 1/7 1/2 lb.
- Ferri et Quininae Cit.**, P.B., 500 ozs. @ 3d. oz.; 100 ozs. @ 3 1/2 d. oz.; 25 ozs. @ 3 1/2 d. oz.
- G**um Acaciæ sorts, 3 cwt. @ 52/6 cwt.; 1 cwt. @ 55/- cwt.; 7 lbs. @ 7 1/2 lb.; English Ground Powder, No. 1, 1/2 cwt. @ 95/- cwt.; 7 lbs. @ 1/- lb.; No. 2, 1 cwt. @ 60/- cwt.; 7 1 s. @ 8d. lb.
- H**oney, Pale Set, Jamaica, 3 1/2 cwt. @ 39/- cwt.; 28 lb. @ 50/- cwt.; Californian, 1/2 cwt. @ 60/- cwt.; 7 lbs. @ 7 1/2 lb.
- Hydragryrum**, P.B., 75 lb. bottle @ 3 16s.; 10 lb. @ 2/8 lb.; 1 lb. @ 2/9 lb.; Ammon. 28 lbs. @ 3/0 1/2 lb.; c. Creta, 28 lbs. @ 1/5 lb.; 1 did. Rub., 28 lbs. @ 8/9 lb.; Oxid. Rub., 28 lbs. @ 3/0 1/2 lb.; Perchlor., Lump, 28 lbs. @ 2 5/8 lb.; Subchlor., 28 lbs. @ 2/9 lb.; Sulph. c. Sulph., 28 lbs. @ 2/7 1/2 lb.; 7 lb. quantities 1 d. lb. extra, 3 lb. quantities, 2d. lb. extra, 1 lb. quantities, 3d. lb. extra.
- I**chthylol Ammon., 3 lbs. @ 10/9 lb.; 1 lb. @ 11/- lb.
- *Inf.** Aurant. Conc., 1 to 7, 6 lbs. @ 1/3 lb.
- "** Aurant. Comp. Conc., 1 to 7, 6 lbs. @ 1/3 lb.
- "** Buchu Conc., 1 to 7, 6 lbs. @ 1/8 lb.
- "** Calumbæ Conc., 1 to 7, 6 lbs. @ 11d. lb.
- "** Caryoph. Conc., 1 to 7, 6 lbs. @ 11d. lb.
- "** Cascarella Conc., 1 to 7, 6 lbs. @ 1/2 lb.
- "** Cichchonæ Acid., 1 to 7, 6 lbs. @ 1/7 lb.
- "** Gentianæ Conc., 1 to 7, 6 lbs. @ 1/- lb.
- "** Quassia Conc., 1 to 7, 6 lbs. @ 9d. lb.
- "** Rhei Conc., 1 to 7, 6 lbs. @ 1/5 lb.
- "** Rosæ Acid. Conc., 1 to 7, 6 lbs. @ 1/8 lb.
- "** Senegæ Conc., 1 to 7, 6 lbs. @ 2/- lb.
- "** Valerian Conc., 1 to 7, 6 lbs. @ 1/3 lb.
- L**in Camph. P.B., 40 lbs. @ 1/- lb.; 9 lbs. @ 1/1 lb.
- Lin.** Sapo Meth., 9 lbs. @ 7d. lb.
- Lin.** Tereb. Acet., B.P., 9 lbs. @ 1/- lb.
- Linseed c. Oil**, Crushed, 3 cwt. @ 24/6 cwt., 1 cwt. @ 25/- cwt.
- *Liq.** Ammonii Acetatis Conc. 1-7, 6 lbs. @ 8d. lb.; 1 lb. @ 10 1/2 d. lb.
- "** Ammon. Aromat., 6 lbs. @ 9d. lb.
- "** Arsenicalis, B.P., 7 lbs. @ 4d. lb.; 1 lb. @ 7d. lb. [1 lb. @ 7d. lb.]
- "** Arsenii Hydrochlor., P.B., 7 lbs. @ 4d. lb.; 1 lb. @ 7d. lb.
- *Liq.** Bismuthi P.B., 6 lbs. @ 1/1 lb.
- *Liq.** Copaiba Bucha et Cubeb, 5 lbs. @ 2/6 lb.; 1 lb. @ 2/10 lb.
- "** Easton, p.s. 1-3, B.P., 1 lb. @ 3/- lb.
- "** Ferri Dialisatus, 6 lbs. @ 7d. lb.
- "** Ferri Iod. p.s., 1-7, 1 lb. @ 5/9 lb.
- "** Ferri Perchlor. Fort., P.B., 7 lbs. @ 4d. lb.
- "** Ferri Phosph. Co. p.s., 1-7, 7 lbs. @ 1/6 lb.
- "** Hamamelidis, B.P., 6 lbs. @ 1/1 lb.
- "** Hypophosph. Co. p.s., B.P.C., 1 lb. @ 3/4 lb.
- "** Iodi Fort. B.P., 5 lbs. @ 4/9 lb.
- "** Morphinæ Acet. or Hydrochlor. P.B., 6 lbs. @ 2/11 lb.
- "** Opil Sed., 5 lbs. @ 3/8 lb.
- "** Plumbi Subacet., P.B., 7 lbs. @ 2 1/2 d. lb.
- "** Pruni Virg. p.s. 1-7, 5 lbs. @ 2/2 lb.
- "** Rhoeados pro syr., 1 to 7, 5 lbs. @ 1/11 lb.
- "** Rhei p.s. 1-7, 6 lbs. @ 2/2 lb.
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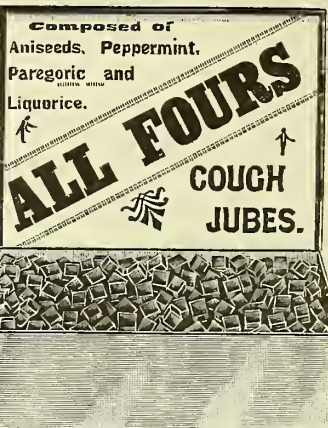
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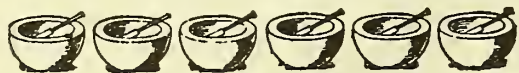
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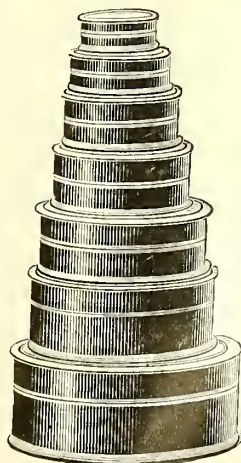
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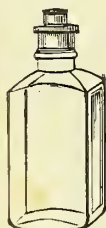


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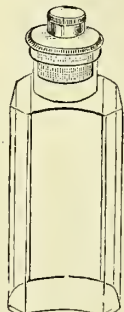


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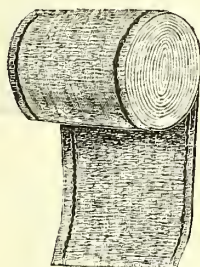
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Medium substance for ordinary wear
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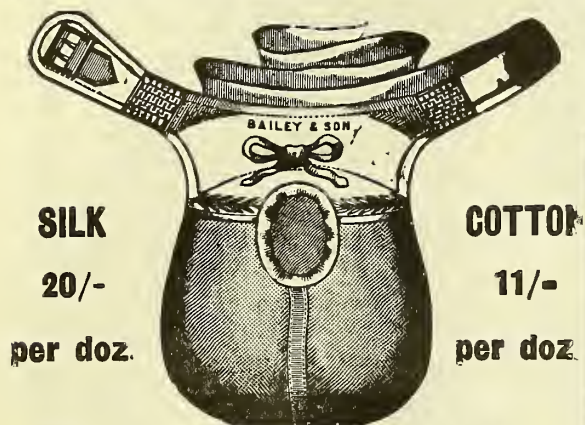
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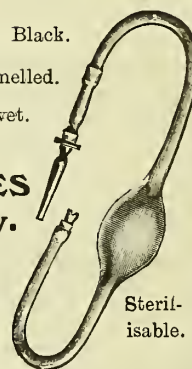
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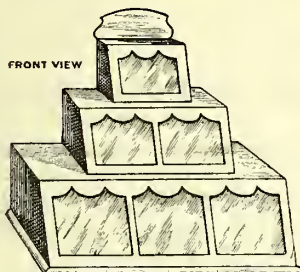
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See pages 5 to 9

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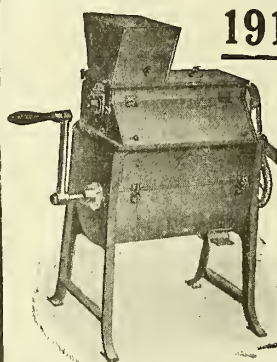
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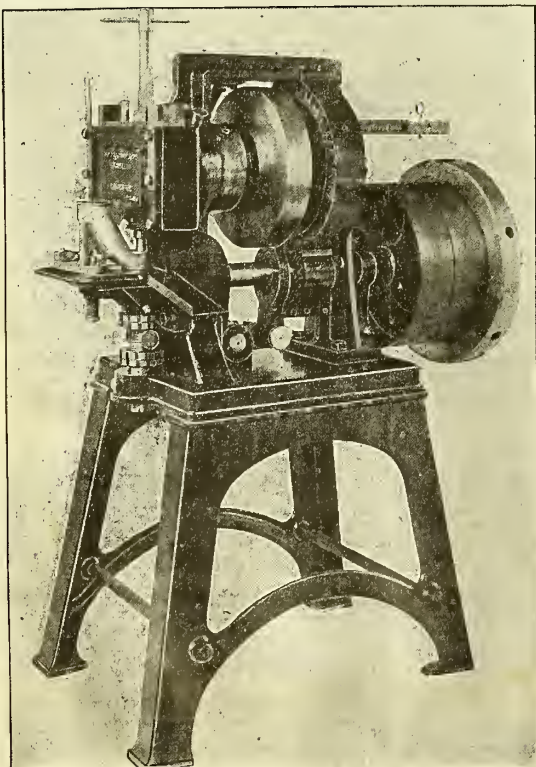
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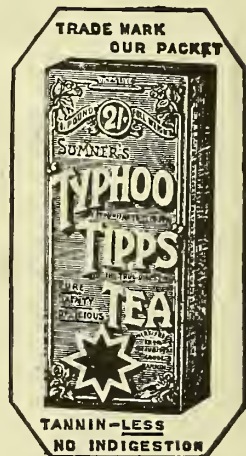
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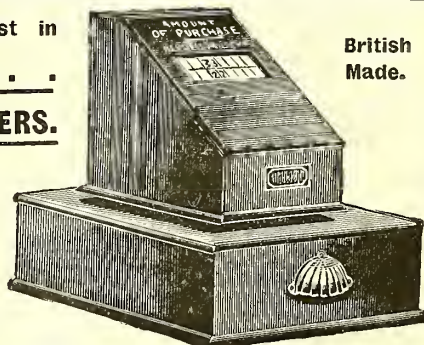
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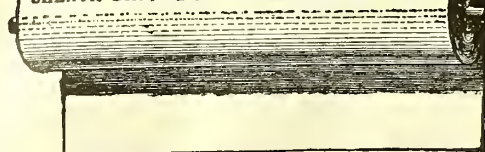
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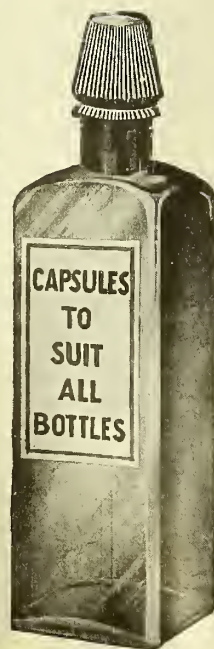
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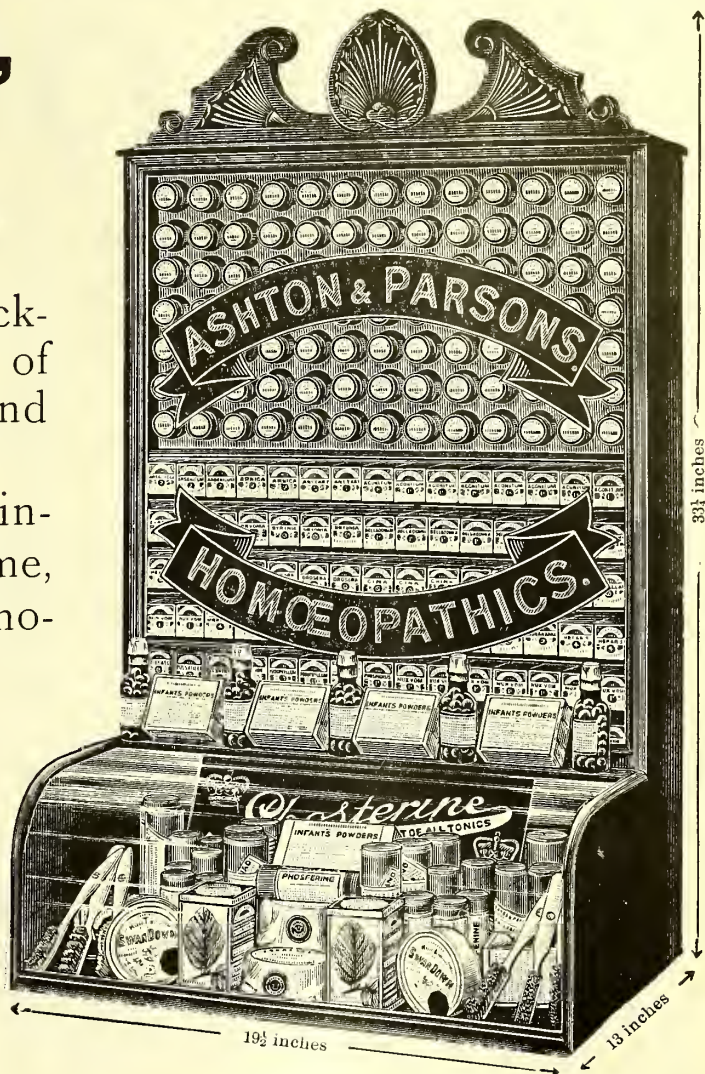
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OFFICE: 42 CANNON STREET, E.C.

SATURDAY, OCTOBER 7, 1911.

A Copy of this Supplement is inserted in every Number issued of "The Chemist and Druggist."

TO ADVERTISERS IN THIS SUPPLEMENT.

The Publisher desires to make it clear that advertisements of Businesses for Disposal and Wanted, Situations Open and Wanted, Exchange Column, &c., **MUST BE PREPAID** (except in the case of serial advertisers) and to ensure prompt insertion **REMITTANCES MUST ACCOMPANY INSTRUCTIONS.** Advertisements for the current issue cannot be received after 4 p.m. on Thursday in each week. If it is necessary to telephone or telegraph an urgent announcement this may be done **PROVIDED THE MONEY IS TELEGRAPHED** at the same time and the fact made clear that the money order is to be delivered at 42 CANNON STREET, LONDON, E.C. Advertisers will assist greatly in the preparation and quick despatch of the Supplement by making careful note of these rules. Telephone: No. 852 Bank (two lines). Telegraphic Address: "Chemicus London."

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3.—LONDON, S.E.—Ready-money Business; returns last year £679; net profit £202; double-fronted shop, fitted in mahogany and plate-glass; rent moderate; no serious opposition; price £280.

4.—WIMBLEDON (near).—Middle-class Business, Retail, Prescribing, and Optical; returns last year £1,037, increasing; gross profit 45 per cent.; attractive shop, single front; good residence, private entrance; price £650.

5.—LONDON, W. (Residential District).—Good middle-class Business, Retail, Dispensing, and Optical; returns under manager between £850 and £900 per annum; roomy shop, corner position; comfortable residence; to effect a speedy transfer the sum of £550 will be accepted.

6.—DORSET (Market Town).—Good-class Business, chiefly ready money; returns over £800 per annum, increasing; comfortable residence, garden; rent moderate; price, to include goodwill, stock, and fixtures, £600.

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NEWCASTLE-ON-TYNE.—Drug Store for Sale; net profit under unqualified (1910) £95, (1909) £120; will be sold at bargain price, owner having left trade; plenty of scope for increase. Apply 202/12, Office of this Paper.

THAMES VALLEY.—Neglected Business; 17 years of lease; rent £30; best offer over £30 will purchase. 181/24, Office of this Paper.

TYNESIDE.—Small Business for immediate Sale, doing over £800; full Off-licence attached; may be had as a bargain. Particulars from "Tyne" (202/13), Office of this Paper.

YORKSHIRE.—Compact Drug Store Business; double-front shop; low rent; splendid chance for young qualified; opening for Dentistry, Optics, and Photography; returns £670, at good profits; price £425. Apply, 199/12, Office of this Paper.

YORKSHIRE.—First-class Retail and Dispensing Business in most desirable town; returns over £1,450; good prices obtained; modern Pharmacy, elegantly fitted and fully stocked; good residence; price required £1,200; stock and fixtures worth about £1,100. Address, "Northern" (205/12), Office of this Paper.

YORKSHIRE.—A General Country Retail in small town of 5,000; good residence; showing a net profit of £300 annually; to a quick cash buyer £550 will be accepted; proprietor's advancing age sole cause of selling. For further particulars write, "County" (181/403), Office of this Paper.

BRANCH Suburban Business for Sale with big chance of a capable man of energy to double his capital; £350 required. Apply "W. G. R." (202/18), Office of this Paper.

EXCEPTIONAL opportunity: through ill health; charming locality; modern well-stocked Pharmacy; good Family and Dispensing; excellent Proprietaries, showing exceptional profit; splendid cases and fittings; electric light and every convenience; good house, warehouse, yard; scope for increase; books properly kept; strictest investigation; Optics and Chiropody can be added with advantage. "Doctor" (201/8), Office of this Paper.

FOR Sale, with early possession, an old-established Chemist's and Druggist's Business in a growing town within 20 miles of London; turnover about £2,000, with good profits; present proprietor retiring. For particulars apply to "A. F. P.," c/o S. Maw, Son & Sons, 7/12 Aldersgate Street, E.C.

GENUINE Cash Prescribing and Retail Business for Sale, or Partnership with view to succession; in present hands 19 years; receipts averaging £950 per annum; can be had on reasonable terms; very few Patents. Apply, "N. R. F." (204/38), Office of this Paper.

GOOD opportunity for acquiring old-established, good-class Chemist's Business; corner shop, situated in North London on main road; net rental £50; average turnover about £1,000; any reasonable offer accepted for Business, including stock, fixtures, and fittings. Full particulars apply, "X. Y. Z.," 53 New Broad Street, E.C.

GOOD-CLASS Light Country Retail for Disposal in Dorsetshire; returning £800, at good profits; centre of good district; low rent; price £600, which is about the value of the stock and fixtures. Further particulars from 181/43, Office of this Paper.

RETAIL and Dispensing Business in best position of best suburb in the North of England; changed hands twice in 80 years; held by vendors 35 years; excellent house; very healthy district, with charming surroundings; satisfactory reasons given for disposal; investigation by principals only; no agents. "Iodine" (202/6), Office of this Paper.

IN THE MATTER OF A. G. GLASSPOOL, LTD.,
CHEMISTS AND DRUGGISTS,
HALESOWEN, KIDDERMINSTER, AND CRADLEY HEATH.
THE Receiver invites offers for the Sale of the above Business as a going concern, with three up-to-date Shops, well fitted for the trade and splendidly situated.
Stock at cost about £1,100; Fixtures and Fittings at cost about £350. A reasonable offer will be accepted.
Every information given on application to the Receiver, Mr. Arthur E. Mason, Chartered Accountant, Dudley; or Messrs. Thomas Cooksey & Co., Solicitors, Old Hill.

BUSINESSES FOR DISPOSAL

(continued.)

£200 for genuine old-established Business in main London thoroughfare; books kept; net profit £194 per annum; low rent; good house and garden; well stocked; would consider near offer. "Mercury" (201/19), Office of this Paper.

£250. — A genuine good-class Cash Retail and Dispensing Business in Midlands; doing £500 per annum; no unsaleable stock; well-fitted shop; profits about £190; rent £22; good house; no opposition; an opportunity which should not be passed for anyone wanting a genuine concern. Apply, "Veritas" (199/6), Office of this Paper.

£265. — Bargain. — London, W. — Light Retail, Prescribing, and Photographic for Sale; profitable; good opportunity to a smart beginner; well stocked; nicely fitted mahogany; electric light; rent £55; long lease; let off 10s. 6d. Apply, letter, "Proprietor," 198 King Street, Hammersmith.

TO LET.



EASTBOURNE. SHOP AND HOUSE,

69 Grove Road, Eastbourne, many years a Pharmacy, next door to Municipal Buildings. Premium required for 21 years lease. Particulars from—

HART, READE & CO., Solicitors, EASTBOURNE.

SURREY.—Good opening for Chemist in thickly populated and growing neighbourhood; corner shop, with good house, to Let; every convenience; facing main-line station. For full particulars apply, 196/36, Office of this Paper.

LARGE and handsomely fitted Drug Stores, with good house accommodation, in busy North London thoroughfare; rent £90, or offer. Gilbert & How, Auctioneers, 5 Crouch Hill, N.

SHOP to Let; exceptionally good opening for a Chemist and Druggist; situated in a fast-growing neighbourhood, with no other Chemist in the road or near, and where same is positively needed; address, 82 Moyser Road, Streatham (next door to Post Office). Apply, H. Thorp, 42 Pretoria Road, Streatham.

SPLENDID opportunity to start a Chemist's Business in a prosperous old agricultural town in Shropshire with busy weekly market. Apply, "Pharmacist," c/o T. B. Browne, Ltd., 163 Queen Victoria Street, E.C.

TO be Let, an old-established Herb and Drug Business; small capital required. Apply, Surgical Hosiery Co., Ltd., Russell Street, Nottingham.

FOR SALE.

DRUG PLANT FOR SALE.—30-gal. Vacuum Plant with Copper Pan, Pump, and Fittings complete, by Morton; Hydraulic Tincture Press, by Tangye; Disintegrator, by Morton; C.I. Jacketed Tilting Enamelled Pan, 26 by 19, by Morton; valuable Copper Still and Gunmetal Condenser; Pill-coating Machine, by Wilkison; Mixing Machine, with bronze knives, by Morton; Gas Oven, 6 ft. by 4 ft. by 4 ft., with trays, by Parkinson; and 2 hand Capsuling Machines. Prices and photos on application, W. J. McCoy & Sons, Ltd., Machinery Merchants, Belfast.

SALES BY PRIVATE TREATY.

FOR Sale, by private treaty, Freehold House and Shop in country town of about 10,000 inhabitants, and, near the same, a House used as a Store, with adjacent land suitable for the erection of a Factory. Apply, principals only, "Sale," c/o British Drug Houses, Ltd., Graham Street, City Road, N.

BUSINESSES WANTED.

WANTED, sound Light Retail and Dispensing Business situated South Midlands, South-West, or South Coast; must show annual net profit of £250 to £350, with exceptional position in town of not less than 30,000 population. Vendors please state full particulars, in strict confidence, to "Norseman" (203/9), Office of this Paper.

S MALL Chemist's Shop with house attached, in healthy mild district, either established or to open; South preferred. W. P. A. Taylor, 28 Dickson Road, Blackpool.

AGENCIES.

G ENTLEMAN, with Indian, Far Eastern, South African, or Mediterranean countries' experience, versed in Druggists' Sundries, desirous of securing another Agency, should apply to "A. B." (173/41), Office of this Paper.

T RAVELLERS and Agents wanted to take up as a Side-line the sale of our Liquorice on a commission basis; same is advertised amongst all the Chemists in the United Kingdom, and therefore only requires following up; small pocket sample; high commission; season now commencing. Russian Liquorice Works, Uralsk, Muswell Hill, London, N.

APPRENTICESHIPS.

A CITY firm of Analytical and Consulting Chemists, having important business connections with large Manufacturing Chemists, etc., have a vacancy in their Laboratory for a well-educated youth as Pupil; moderate premium required; thorough training in Analytical, Commercial, and Technical Chemistry, Microscope, and Assay work. 205/30, Office of this Paper.

B RISTOL.—A vacancy occurs in a Light Retail and Dispensing business, in good-class neighbourhood, for a well-educated youth as an indoor Apprentice, where there would be every opportunity of acquiring a thorough knowledge of the business. Apply, 199/27, Office of this Paper.

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

SITUATIONS OPEN

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

NOTE.—Replies can be addressed to this Office and forwarded to the Advertiser for an Additional charge of 6d.

RETAIL.

BEXHILL.—Wanted shortly, experienced Assistant, chiefly for Dispensing Counter; permanency; outdoors. Please give full particulars of previous experience, age, height, salary required, and send photo, Robbins, 44 St. Leonards Road.

BOURNEMOUTH (near).—Junior for good-class Retail and Dispensing; half-day weekly. Cartledge, Parkstone, Dorset.

BOURNEMOUTH.—Junior, smart gentlemanly Assistant, required on early date; must be reliable Dispenser and good Counterman. Apply, stating age, height, salary required, and references, with photo if possible, to Gilbert & Hall, 15 Commercial Road, Bournemouth.

BOURNEMOUTH.—Wanted at once, a smart capable Dispenser, of gentlemanly appearance, possessing first-class experience, also practical knowledge of Photography; qualified; outdoors; age 27-33. Apply, stating full particulars and salary required (enclosing photo), to A. F. Lawrence, The Square, Bournemouth.

BRIGHTON.—Chichester Dispensary.—Required, a Woman Dispenser, qualified, 3 afternoons, 3 evenings, and 1 morning a week; salary £1 a week. Apply, Hon. Secretary, 4 Ditchling Road, Brighton.

CARDIFF.—Qualified Assistant wanted; outdoors; hours 9 A.M. to 8 P.M.; weekly half-holiday; no Sunday duty. State age, height, experience, and salary required, D. Anthony & Co., Chemists, Cardiff.

CHESTER.—Improver or Junior wanted (indoors); one with Dispensing experience. Apply, stating age, height, salary, experience, with references, to Thos. Cartor, Pharmaceutical Chemist, Boughton, Chester.

DEVONPORT.—Wanted, a qualified Assistant, accustomed to a good-class Retail and Dispensing business; one desirous of a permanency; good references. State age, height, experience, and salary required (outdoors), W. M. Martin, Chemist, Fore Street, Devonport.

HORSHAM.—Junior or Improver for a high-class business; knowledge of Photography essential; indoors. Give full particulars, salary, references, etc., and photo if possible, Williams & Smith, Chemists, Horsham.

LANCASHIRE.—Dispenser wanted, single (outdoors), in busy Surgery; must be quick and active. State age, height, salary, and experience, and give reference to last employer, "Medicus," 114 Friargate, Preston.

LEEDS.—Capable Assistant required, who is conversant with good-class business; must have exceptional references. State age, height, experience, and salary required (outdoors), 204/13, Office of this Paper.

LIVERPOOL.—A reliable Junior, accustomed to Dispensing and Light Retail; sleep and breakfast out, and board out Sundays, dinner and tea provided week-days. State particulars, salary, etc., to A. Shaw, Pharmacist, 43 Green Lane, Stoneycroft, Liverpool.

LIVERPOOL.—Manager, qualified, for Branch; good Salesman and accurate Dispenser; trustworthy, reliable, and obliging; weekly half-holiday; Sundays, 1 in 3 off; live on premises. Apply, with full particulars, stating age, salary, references, married or single, etc., to W. Ashworth, Chemist, 24 Seaforth Road, Seaforth.

LONDON, W.—Indoor Assistant; age about 24-26; qualified by preference, but not absolutely essential if with good all-round experience; energetic, and with knowledge of Photography; abstainer preferred; half-day off weekly. Salary required and usual particulars to Barton Dell, 148 King Street, Hammersmith, W.

LONDON, W.—An unqualified Assistant for Dispensing business; indoors. Apply, by letter, "X. Y. Z.," c/o British Drug Houses, 22 Graham Street, City Road, N.

LONDON, W.C.—Qualified Assistant, 30 to 35, wanted by October 16; good Dispenser and Counterman; accustomed to good-class business; indoors, without board. Apply, with photograph, Manager, 126 Strand, London, W.C.

LONDON, N.W.—Assistant wanted; qualified; outdoors; age about 23-25; good-class Counter and Dispensing experience essential. Personal interview preferred; if letter enclose photo and give full particulars, stating salary required, T. F. Elton, 28 Endsleigh Gardens, Euston Square, N.W.

LONDON, W.—Wanted, an Assistant (indoors), accustomed to good-class Dispensing and Retail. If by letter, please state full particulars and enclose photo, Abel & Co., 108 Queen's Road, Bayswater.

LONDON, N.—Wanted immediately, Manager for suburban Branch, qualified, married. Apply personally if possible; if by letter state age, experience, references, and photo (if convenient), and salary required (with house and gas), to Hearle, 33 Liverpool Road, Islington, N.

LONDON N.—For quick Cash business, energetic, capable Assistant, able to take occasional charge; outdoors; hours 9 to 10; Saturdays 11; one hour off for dinner; one hour for tea; one day off each week at 2 o'clock; duty every other Sunday evening only from 6 to 9.45. Full particulars 202/32, Office of this Paper.

LONDON, S.W.—Relief Assistant wanted permanently every Wednesday; Junior preferred; suitable for a student. In reply state whether one other day can be given if required, also references, other engagements, age, and remuneration, to "G. B." (201/11), Office of this Paper.

LONDON, W.—Qualified Assistant required shortly with Continental and West End experience; must speak and understand French well; smart Salesman and attractive window-dresser. Apply, with particulars of age, experience, and salary required, 201/12, Office of this Paper.

LONDON, S.W. (near Colleges).—October 30, indoor Assistant, with good-class experience. Full particulars, salary, photo (to be returned), to "Radix" (204/39), Office of this Paper.

LONDON, N.W.—Two Assistants wanted immediately, one qualified (£80), one unqualified (£40); indoors; comfortable home; not under 21 years of age. In replying please give age, height, experience, references, and if possible enclose photo, "Statim" (204/37), Office of this Paper.

LONDON, S.W.—Unqualified Assistant; age 23-24; good appearance and address; used to high-class Dispensing, Photography, and general modern Store; outdoors; half-day weekly; photo, undeniable references. Percy T. Harris, M.P.S., 183a King's Road, Chelsea, S.W.

LONDON, W.—Qualified Assistant, with good experience. Apply (by letter only in first instance) to Wallas & Co., 36 New Cavendish Street, W.

LONDON, W.C.—Junior wanted; outdoors; must be a quick worker, good Dispenser, and smart Counterman; anxious to learn; knowledge of foreign languages an advantage, but not essential. Apply, with full particulars, enclosing photo (to be returned), to Cofman's Pharmacy, 6 Bloomsbury Street, W.C.

LONDON, S.W.—Wanted, smart Junior with good all-round knowledge of the trade; personal application preferred. Apply, Francis & Son, Ltd., 448/50 Brixton Road, S.W.

LONDON, W.—Assistant, qualified, for small Branch; live out. Apply, 220 Edgware Road, W.

LONDON, S.W.—Required, a Counter Assistant in a large West End house; age about 25; unqualified; tall and of gentlemanly appearance. Write, stating full particulars, to 880, Sell's Advertising Offices, Fleet Street, London.

LONDON, S.W.—Junior Assistant, with some experience in Dispensing, wanted immediately; good-class modern Retail and Dispensing business; not under 21; comfortable berth. Write or call, Keith Longstaff, The Central Pharmacy, 811 Fulham Road, S.W. (a little beyond Walham Green).

LONDON, N.W.—Part-time Assistant wanted for evenings and one or two afternoons weekly, to live in; Dispensing business. Apply, 205/21, Office of this Paper.

LONDON, S.E.—Qualified Manager wanted, to take charge of smart working and middle class business; married preferred, to live on shop premises; salary £150 and commission; applicants kindly state full particulars of experience, age, etc. Apply, 205/23, Office of this Paper.

MAIDSTONE.—Junior or Improver in a good-class Family and Dispensing business, indoors or outdoors, former preferred; good opportunity for experience; a turnover Apprentice considered; applicants will please state age, height, reference, salary, photo (to be returned); communications not answered in 3 days respectively declined. Oliver, late Etonham, Maidstone.

MALVERN.—Young qualified Assistant, also Junior or Improver, for good-class Dispensing business. Please give full particulars in first instance, stating salary required (indoors) and enclose photo if convenient, A. E. Baylis, Great Malvern.

MANCHESTER.—Wanted, Junior Assistant (outdoors), age about 21 years, for middle-class Retail business (2 other Assistants kept); half-holiday from 1 P.M. and an afternoon from 1 to 6 P.M. Apply, stating age, height, experience, copy of references, and salary required, to Lockwood's, Ltd., Chemists, Harpurhey, Manchester.

MANCHESTER.—Wanted qualified Assistant (outdoors) for Mixed Retail and Dispensing business; half-holiday weekly. Apply, with full particulars (photo if possible), stating salary, references, etc., "Chemists," c/o Messrs. Woolley & Co., Ltd., Victoria Bridge, Manchester.

MANCHESTER.—Reliable Assistant; outdoors; age about 25; hours 8.30 to 8.30; Saturdays 10; occasional Sunday duty; state experience, salary required, and other necessary particulars. Apply 202/28, Office of this Paper.

MANCHESTER District.—Required, a gentlemanly qualified Manager for a smart little Pharmacy, newly opened; permanency and improving position to a really good man; must be married, although position is outdoors. 199/29, Office of this Paper.

NEWCASTLE-ON-TYNE.—Qualified Assistant (outdoors) for Branch; must be tall and not less than 25, with considerable experience and highest references. Give full particulars and salary required in first letter, A. E. Strother, Pharmacist, 141 Elswick Road, Newcastle-on-Tyne.

NOTTS.—Wanted, good Junior in high-class Country business (indoors), about 20; Dispensing and Photographic experience necessary. Full particulars of salary required, with references and photo, to "Pharmaceutical Chemist," c/o Dr. H. Hargreaves, Collingham Bridge, Leeds.

ST. LEONARDS-ON-SEA.—Junior Assistant; outdoors. State age, experience, salary required, and enclose photo (to be returned), to Neve & Co., Silverhill, St. Leonards.

SHROPSHIRE.—Qualified Assistant for good-class country business; live on premises; chance of good permanent situation for reliable married man, middle-aged (or older), without encumbrance; hours easy. Apply, stating salary, age, experience, with references, to "Euonymin" (200/31), Office of this Paper.

SOUTHAMPTON.—Assistant required for Light Retail and Dispensing business. Apply, with usual particulars, enclosing photo and stating salary required (indoors), to R. H. Fowler, 56 London Road, Southampton.

SOUTHSEA.—Wanted, Junior Assistant, accustomed to good-class trade; outdoors. Apply, enclosing carte (to be returned), to T. A. White, Pharmaceutical Chemist, Elm Grove, Southsea.

A COMPETENT Senior qualified Assistant wanted; must have first-class Dispensing and Counter experience, with some knowledge of Amateur Photography; references must bear strict investigation; permanency; outdoors; weekly half-holiday. Enclose photo, Julian Horrell & Co., The Pharmacy, Broadstairs. A Junior also required.

A FIRM of Pharmaceutical Chemists (Midlands) require a thoroughly reliable, experienced, energetic Assistant (qualification not essential), of good appearance and address; and a smart Salesman, principally for outdoor work. Applicants please give very full particulars, salary (outdoors), and photo, to "Enterprise," c/o Meggeson & Co., Miles Lane, Upper Thames Street, London.

A JUNIOR Assistant required for a Mixed Agricultural Country business, with Dispensing, in a small town; indoors. Apply, with full particulars, to Gwilliam, Bishop's Castle, Shropshire.

ASSISTANT, 24 or 25; must have passed Prelim. and possess knowledge of Chemistry and Photography; duty 60 hours weekly; one afternoon and one evening free. State particulars in full, W. Shadforth, 63 Grove Road, Bow, London, E.

ASSISTANT required (indoors), one just out of apprenticeship preferred, for good-class Birmingham Pharmacy. Apply, with full particulars and photo, to 570 Moseley Road, Birmingham.

ASSISTANT wanted for good-class Dispensing and Retail business. Reply, stating full particulars, experience, and salary required, first instance, W. Toogood, 11 Southwark Street, London.

ASSISTANT, unqualified, wanted; outdoors. State age, height, experience, and salary required, sending photo (to be returned), Lands, Cash Chemists, Coalville.

DISPENSER wanted (Lady); Surgery practice; Sunday work. Apply, between 2 and 4 o'clock, to Dr. Cremin, 89 Camden Road, N.W.

DISPENSER-BOOKKEEPER to Surgeon; light duties; married; must be smart and thoroughly capable. Apply, Dr. Gowans, South Shields.

JUNIOR or Improver wanted immediately; indoors; comfortable home; must be active and obliging. Apply, stating full particulars as to age, references, salary required, also please enclose photo (to be returned), to Evans, Pharmacist, Dowlais, South Wales.

JUNIOR Assistant wanted for good-class Dispensing and Retail business (indoors); weekly half-holiday; age about 21 years. Please send full particulars and salary required, A. Porter, Pharmacist, Ross, Herefordshire.

RESULTS
OF ADVERTISING IN THIS SUPPLEMENT.
LAST WEEK SEP 30 1911.
NATURE OF ADVT. REPLIES
MANAGER 24
" (SUBURBAN) 19
MAN TO TAKE CHARGE 18
LADY DISPENSER 16
QUAL PHARMACIST 13
TRAVELLERS 11

This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements. The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of Advertisers who use a number or nom de plume.

TO SAVE TROUBLE.

MANY correspondents answering advertisements in this Supplement enclose remittances to cover the cost of forwarding their letter to advertisers who prefer to be addressed o/o this Office. The Publisher desires to make it clear that this is quite superfluous and perhaps this reminder will obviate the necessity of the frequent return by him of such remittances.

ANSWER IN TERMS OF THE ADVERTISEMENT AND

REMEMBER you are one of possibly hundreds applying for the same position. Put your case before the advertiser so that he may be able to form a MENTAL PICTURE of your suitability.

BE BRIEF BUT CLEAR—millions of applications are consigned to the waste-paper basket UNCONSIDERED, because the reader cannot form this picture from the inadequacy of the materials set before him.

JUNIOR wanted; must be used to quick Store trade, have fair knowledge of Prescribing and Dispensing; one who can dress a window preferred; age about 25; unmarried. Full particulars to McCarthy, Chemist, Grays.

MANAGER for small Branch wanted; married preferred. State age, experience, salary expected; must bear highest references. Write or call personally to M. Matz, Chemist, 5 Bury New Road, Manchester.

MESSRS. BARNARD & SON, 309 Hackney Road, London, have a vacancy for a Junior; one accustomed to a middle-class Store trade preferred; 2 kept; hours 8.30 A.M. till 10 P.M.; half-day off weekly. State salary (indoors), when disengaged, references, etc.

PHARMACIST wanted for new Branch; good salary and prospects; must possess exemplary character for honesty and sobriety. Timothy White Co., Ltd., Chemists, Portsmouth.

QUALIFIED Manager for branch shop in working-class district in Midlands; must be married, energetic, and hold satisfactory recent references; salary and commission, with free house and lighting; weekly half-holiday; closed Sundays. State salary required and enclose photo (to be returned), Martyn's Stores, Ltd., Wolverhampton.

QUALIFIED Dispenser wanted; part time shop Dispensing and part time Hospital Dispensing; comfortable indoor berth. Write, with fullest particulars and salary required, to "T. O. M." (196/29), Office of this Paper.

QUALIFIED Manager; abstainer; outdoors; good Dispensing experience and pushing and energetic in all ways; permanency to suitable man with good appearance and address; salary £2 10s., with commission. Apply, with references and photo, 205/25, Office of this Paper.

S. F. GOSS, LTD., 460 Oxford Street, require smart, experienced, S. unqualified Assistant as Second Counterman; also young experienced, unqualified Dispenser; no holiday or Sunday duty.

SEASIDE Resort, South Coast.—An Assistant capable of taking charge in absence of principal; indoors; short hours and half-day at 2 P.M. weekly; permanency to suitable gentleman. State full particulars in first letter, including salary required and photograph, to 204/12, Office of this Paper.

T. JONES & CO. require at once a qualified Assistant, age about 24 to 26, for good-class Dispensing business; must have good references. Apply, with photo if convenient, to Mr. Amore, 5 Putney Hill, S.W.

UNQUALIFIED Assistant, 25-35, wanted immediately; outdoors, medium or tall; 8.30-8.50, Wednesdays off 2-6; no Sunday duty; good Window-dresser, knowledge of Photography; best references only; good post and wages for honest, capable, reliable man. Tamplin & Son, Kingston-on-Thames. If in London district phone to 245 P.O. Kingston-on-Thames.

WANTED at once, a Junior Assistant for a Mixed Agricultural business. Apply, with full particulars and photo, to G. Ayre & Son, Thirsk.

WANTED, competent Manager for Branch, North Yorkshire; age about 30; single; energetic and capable; must be well recommended, temperate, and obliging; able to Extract and Prescribe; indoors or outdoors; half-holiday; little Sunday duty; progressive salary to a worker. Full particulars as to age, height, and experience, salary, etc., to 197/82, Office of this Paper.

WANTED, a Junior Assistant, about 19 or 20 years of age (indoors); comfortable home; hours of business easy; weekly half-holiday and no Sunday duty. Apply, full particulars please, to "H. H. & Co." (202/5), Office of this Paper.

WANTED, unqualified Assistant, aged about 24, for country business; Horticultural experience desirable. Full particulars to 181/22, Office of this Paper.

WANTED (at once), qualified Assistant (outdoors), age 25 to 35, for Light Retail. Apply, stating age and salary required, also enclose references, to Fredk. R. Nichols, Pharmacist, St. James' Street, Walthamstow.

WANTED, October 27, Assistant for good-class Dispensing and Retail business; age about 25. Apply, with full particulars, to R. C. Davenport, Pharmacist, Bromley, Kent.

WANTED, a young qualified Assistant (indoors) for a good-class Pharmacy in Kensington; first-rate experience essential. Letters only to "C. O." S. Maw, Son & Sons, 7-12 Aldersgate Street, E.C.

WANTED immediately, a good all-round Assistant (indoors). Please give usual particulars, state experience and salary required, "Pharmacist," 14 Highbury Park, N.

WANTED about November 1, Junior or Improver (indoors). J. H. Smith, The Pharmacy, Morcton-in-Marsh.

WHOLESALE.

A THOROUGHLY reliable, competent, and smart Traveller wanted for London by Manufacturers of Surgical Rubber goods and Sundries; must have good connection and first-class references. Apply, 181/39, Office of this Paper.

ASSISTANT required for Wet Counter. State whether qualified, age, particulars of last situation, how long held, why relinquished, salary desired, Timothy White Co., Ltd., Portsmouth.

FIRM of Wholesale Chemists in North of England require a capable Assistant, with thorough knowledge of Doctor's trade, to take charge of Warehouse and Despatch Department. State age, experience, and wage required, 177/41, Office of this Paper.

FOREWOMAN wanted to superintend girls putting up Medicines and Toilet Preparations; must have had good experience. Reply, by letter only, "A. K.," "Northfield," Colney Hatch Lane, Muswell Hill, N.

INVOICE Clerk. — Wanted, for provincial Drug house, a thoroughly experienced Clerk; must be well up in Prices and exceptionally quick and accurate. Address, in confidence, stating age, experience, and salary required, to "Alpha" (199/4), Office of this Paper.

INVOICE Clerk (London); quick at figures; experienced; age 20 to 22. State full particulars, 181/307, Office of this Paper.

TABLET and Pill hand (female); must have had experience. State age, salary, and full particulars, 181/37, Office of this Paper.

TRAVELLER.—A vacancy has occurred in the London district with a firm having extensive business with Stores, Institutions, Chemists, and Grocers; applications from gentlemen (qualified Chemists preferred) having a wide experience will be carefully considered in confidence if accompanied by full particulars; age and salary required should be mentioned. Reply to 200/23, Office of this Paper.

WANTED, a Proof Reader, mainly for Label work, having a thorough acquaintance with Pharmacy. Apply, 179/61, Office of this Paper.

WANTED, for a large provincial firm, Chemist capable of superintending the Manufacturing of high-class Medical Pastilles and Jujubes; permanent situation and liberal terms to suitable person. Apply, 199/25, Office of this Paper.

WANTED, Improver for Warehouse. State age and salary required, 181/21, Office of this Paper.

WANTED, experienced Invoice Clerk, under 30. Apply, by letter, stating experience and salary required, to Oldfield, Pattinson & Co., Manchester.

SITUATIONS OPEN

(Colonial, Indian, and Foreign).

3s. 6d. for 50 words or less; **6d.** for every 10 words or less beyond, prepaid. Replies addressed to this office will be forwarded to the advertiser for an additional charge of **6d.**

AFRICA.—Manager wanted; steady, capable, pushing Salesman and good Dispenser; 3 years' agreement; salary first year £18 per month, second year £19, third year £20; second-class passage paid out and home. Apply, "F. W. J.," c/o Evans Sons Lescher & Webb, 60 Bartholomew Close, E.C.

BELGIUM.—Wanted, in Brussels Pharmacy, unqualified Assistant, speaking a little French, for November 1; good opportunity to learn French and Continental Dispensing. State salary, send photo and references, 179/63, Office of this Paper.

SITUATIONS OPEN *(continued).*

CEYLON.—Chemist, with Minor certificate Pharmaceutical Society, required, about 24, single, for first-class British business in Colombo; excellent opening for smart Assistant with experience of good-class trade; passage paid out and home. Apply, with full particulars, to Dakin Bros., Ltd., 82 Middlesex Street, E.C.

INDIA.—Qualified Chemist wanted, pushing Retail Salesman, with good-class experience; 4 years' agreement; salary 200 rupees per month first year, 225 rupees per month second year, same third year, 250 rupees fourth year; second-class passage paid out and home. Apply, "J. W. S.," Evans Sons Lescher & Webb, 60 Bartholomew Close, E.C.

JAPAN.—Qualified Assistant, not under 30; 5 years' agreement; second-class passage paid via Siberia; speaking French or German an advantage; salary first year £144, advancing £12 per annum; free quarters and board; if possible to proceed mid-October. Apply, with copy testimonials and photo, to "R. L.," c/o S. Maw, Son & Sons, Aldersgate Street, E.C.

RANGOON.—Assistant required, age about 25 to 30; Minor qualifications; 4 years' agreement; salary first year 250 rupees per month, rising by 25 rupees per month annually to 325 rupees; passage paid. Apply, stating full particulars as to experience, etc., to Indo Burma Co., Ltd., 108 Wool Exchange, E.C.

SOUTH AFRICA.—Required at once, for an important town, first-class qualified Assistant, not over 24 years; single; one with good Dispensing experience and a knowledge of Photography preferred; three years' agreement; second-class passage paid out; salary first year £16, second year £17, third year £18 per month. Apply, by letter, giving full particulars, to "Natal," c/o Messrs. C. J. Hewlett & Son, Ltd., 35-42 Charlotte Street, London, E.C.

STRAITS SETTLEMENTS.—Required at once, qualified Assistant for up-to-date Pharmacy; Scotchman preferred, of smart appearance, having had good Dispensing experience, and with a knowledge of Eye-testing; good prospects for a steady hard-working young man; age about 25 years; single; four years' agreement; second-class passage paid out; salary first year £280, second year £300, third year £320, fourth year £350 per annum. Apply, by letter, "Penang," c/o Messrs. C. J. Hewlett & Son, Ltd., 35-42 Charlotte Street, London, E.C.

SITUATIONS WANTED

1s. for 12 words or less; 6d. for every 10 words or less beyond, prepaid.

NOTE.—Replies can be addressed to this Office and forwarded to the Advertiser for an Additional charge of 6d.

[HOME].

RETAIL.

J. PYE, qualified Chemist, disengaged. 62 Lynette Avenue, Clapham Common.

MANAGER or Assistant; 36; qualified; abstainer. "R.," 96 East Dulwich Road, S.E.

JUNIOR; 20; 4½ years' experience; Manchester district. Roberts, 11 Halstead Street, Bolton.

JUNIOR; 19; good experience; Yorkshire preferred. Shaw, 207 Dewsbury Road, Leeds.

LADY; qualified; good references. "B.," c/o Miss Horniblow, 4 Queen's Buildings, Llandudno.

JUNIOR; 19; 3½ years' experience, Dispensing, Photography. "B.," 50 Hereford Street, Newport.

UNQUALIFIED; 22; good experience. H. Friedland, 23 Heywood Street, Cheetham, Manchester.

QUALIFIED; 25; disengaged; City and country experience. Callow, 15 London Road, Canterbury.

UNQUALIFIED; 38; good experience; reliable, steady; disengaged. Mack, 63 Holland Park Avenue.

JUNIOR; experienced; unqualified; time for study required; Midlands preferred. Jephcott, Redditch.

JUNIOR; 19; 5 ft. 10½ in.; disengaged; Birmingham or district preferred. Cattell, Swan Hotel, Stourport.

JUNIOR; 19; 3½ years' experience, Dispensing, Photography; good references. Fildray, Burnham, Somerset.

UNQUALIFIED, gentlemanly Assistant; age 21; 4 years' experience. Gaud, 51 Great Portland Street, W.

QUALIFIED; Locum or permanent; any capacity; disengaged. "Chemist," 48 Convingham Road, Shepherd's Bush.

IMPROVER, in or around London; Counter and Dispensing experience. Apply "Aspirin," 155 Clapham Road, S.W.

QUALIFIED; 31; disengaged; Extractor; experienced; Manager or Assistant. Davies, Tyowrdd, Llwynhendy, Llanelly.

MANAGER; married; would not object travel South Wales district; disengaged. "Chemist," 13 Cressy Road, Cardiff.

LADY Pharmacist requires post; age 23; "Square" trained; apprenticed in Retail. M. Bolton, 36 Dover Street, Hull.

QUALIFIED, experienced Manager; married; middle-aged; excellent references. "F. W.," 267 Dunstable Road, Luton.

FRENCH Assistant, from high-class Paris Pharmacy, seeks place in London; small salary. Bataille, 40 Rue Custine, Paris.

MANAGER; qualified; registered Dentist; town and country experience; middle-aged, active. "H.," 123 Shirland Road, W.

QUALIFIED; good experience; reliable; outdoors preferred; disengaged shortly; age 25. "Minor" (139/9), Office of this Paper.

LOCUM or temporary Manager; town or country; experienced Pharmacist; disengaged. Price, Brynamlwg, Crowborough, Sussex.

QUALIFIED; 26; abstainer; Counter, Dispensing, Photography; West-End experience; outdoors; disengaged. 198/35, Office of this Paper.

LOCUM, temporary Assistant, or part-time; qualified; 37; disengaged until November 21. J. B. Davis, 17 King's Road, Chelsea, S.W.

ASSISTANT; 22; disengaged; tall; Wholesale, Retail; Dispensing, Photographic. "Carbo," 20 Constantine Road, Hampstead, N.W.

OCTOBER 11; disengaged; tall; first-class experience; reliable; Locum, weekly relief, or—"Permanency," 52 Ethel Road, Custom House.

LOCUM or Manager; 16 years' all-round experience; disengaged 9th inst; South Lanes district. "Qualified," 55 Sandy Road, Seaforth, Lanes.

QUALIFIED Locum or temporary Assistant; at liberty for 6 weeks; 25; well recommended. G. B. Dauel, 272 High Road, Wood Green, N.

LADY; qualified; Dispensing and Retail experience; London or provinces. "A.," c/o Miss Wardle, Gordon Hall, Gordon Square, London.

GENERAL experience, middle-age, Dental; away from trade short time; moderate salary. "W. J.," Watergate, Illogan, Redruth, Cornwall.

PART-TIME or Locum by Student who has just failed in Minor: 25; London experience; can take charge. "W. L. M.," 87 Fentiman Road, S.W.

PHARMACIST; disengaged; Locum or permanency; Manager; 12 years' good-class experience. "A.," 12 Tyndall's Park Road, Clifton, Bristol.

DISPENSER (Hall); disengaged; temporary or permanent; long experience; first-class testimonials. Burrows, 11 Hibbert Street, Battersea, S.W.

DOVER, Ramsgate, or vicinity.—Assistant; unqualified; West-End, provincial, and Hospital experience. "Bruceine" (198/8), Office of this Paper.

QUALIFIED; 24; height 5 ft. 9 in.; English and Continental experience; temporary or permanency; disengaged. 199/15, Office of this Paper.

LOCUM, Relief, emergency, part-time; disengaged; engagements invited; 30 years' experience, all grades. Smith, 99 Longden Road, Longsight, Manchester.

JUNIOR; 19; 5 ft. 9½ in.; 3 years' good-class experience, particularly Dispensing, Photography; Southern Counties preferred. 61 Victoria Road, Exmouth.

QUALIFIED; 27; good varied experience, North, Mayfair, South Coast; in or out doors. "The Locum," 20 Front Street, Colliery Row, Fence Houses, Durham.

QUALIFIED; 27; disengaged; good-class Dispensing and Counter experience, London and provinces; outdoors preferred. T. W. Bolton, 22 Hills Road, Cambridge.

LOCUM or Part-time; experienced; highest references; advertiser is in position to accept moderate remuneration. "Pedophyllin," 9 Stanlake Villas, Shepherd's Bush, W.

DISPENSER (Apothecaries' Hall), trained Nurse, desires post end October with Doctor or Institution; experience in public Dispensary. "A. H." (198/37), Office of this Paper.

QUALIFIED (24), tall, wishing to read up for Optical, wants engagement, London; Clapham or Brixton preferred; Counter work. Griffiths, 28 Llewellyn Street, Pentre, Glam.

MANAGER, Senior, or other responsible position; good London and provincial experience; 33; disengaged October 17. "Pharmacist," 81 Revelstoke Road, Wimbledon Park, S.W.

JUNIOR (20) disengaged; 4½ years' experience in modern Retail and Dispensing business; outdoors; good appearance; town preferred. "Ambitious," 155 Cleethorpes Road, Grimsby.

DISPENSER, unqualified, with excellent Hospital and Doctors' experience; steady and perfectly reliable; age 20; good references. Pidoux, Wood's Lane, Stapenhill, Burton-on-Trent.

MANCHESTER District.—Part-time situation in good-class business; good references, training, and experience; tall; interview arranged. "Student" (199/13), Office of this Paper.

DISENGAGED; middle-aged; experienced Prescriber, Counter-man, and Stockhand; excellent references; abstainer; unqualified. "Senior," 5 Beaconsfield Cottages, Hillingdon, Middlesex.

LOCUM; active, reliable; highest references; disengaged October 20 to November 7. Write or wire, R. Garry, Chemist, c/o Mr. T. C. Flower, Chemist, Pier Street, Ryde, I. of W.

LADY Dispenser (Hall), experienced, seeks re-engagement; outdoors; London or Suburbs; South-West district preferred. "L.," Heathfield Lodge, Granville Road, Southfields, S.W.

UNQUALIFIED Assistant; experienced; Mixed Retail, Dispensing; reliable, trustworthy; able to take charge; tall; outdoors; married; excellent references. "D.," 144 Tower Bridge Road, S.E.

MANAGER, qualified, seeks permanency; energetic, reliable, and trustworthy; capable Prescriber and Extractor; undeniable references; shortly disengaged. Apply, "Salol," 416 Mare Street, Hackney, N.E.

MANAGING-ASSISTANT; 31; unregistered; small Drug Store or Branch; near London; possibility purchase; successful Prescriber; married; live premises; early November. "B.," 20 Borneo Street, Putney.

ASSISTANT; experienced; unqualified. 204/14, Office of this Paper.

DISPENSER, Doctor or Retail; good references. "Isis," 3 Banister Road, Kensington North.

ASSISTANT; unqualified; 30; tall; good experience, town and country. 201/9, Office of this Paper.

PART-TIME; mornings and evenings; outdoors; qualified. "Chemist," 14 Sandmere Road, Clapham.

UNQUALIFIED; 28; good all-round experience; London preferred. "Veronal," 33 Wilberforce Road, N.

DISPENSER, Assistant, Locum; unqualified; moderate salary. "Menthol," 87 Dutton Street, Blackheath Hill.

DISPENSER and Bookkeeper to Surgeon; good references; 12 years one situation. 201/14, Office of this Paper.

LOCUM, now disengaged; qualified; sober, trustworthy; references. Pepperdine, 109 St. Leonards Road, Hove.

SENIOR; 11 years' experience; qualified; now disengaged; London or provinces. "D.," 164 Clapham Road, S.W.

IMPROVER; 23; abstainer; moderate salary; good reference. "Cortex," 10 Gaisford Street, Kentish Town, N.W.

MANAGER or First Assistant; 21 years' experience; disengaged; references. Ellison, Kilnburst, Rotherham.

QUALIFIED; 26; good experience, Dispensing, Counter, and Photography. French, Chesterton Mills, Cambridge.

GOLD Medallist Vienna 1906 for Perfumery; young English qualified Chemist. "W.," (204/15), Office of this Paper.

LOCUM or permanency; Manchester district preferred; qualified; 26; good-class experience. 201/39, Office of this Paper.

WANTED, situation as Improver; good Dispensing experience; 5 ft. 8½ in.; age 24; good references. 205/1, Office of this Paper.

QUALIFIED Manager; 30; best experience; good references; Photography; permanency. "Gentian" (202/1), Office of this Paper.

IMMEDIATELY.—Thoroughly experienced, competent man requires berth; any period. "Rhei," 75c Camberwell Station Road, S.E.

LADY Dispenser (Hall) requires post, Doctor or Institution; London preferred. Wharton, Elm Lodge, Kirkdale Road, Leytonstone.

LOCUM or permanency; 35; disengaged; good all-round experience; well recommended. "Extractor," 36 Cedar Road, Fulham, S.W.

PHARMACIST, middle-age, seeks position with unregistered Chemist or Company; Dentistry. "Chloral" (205/20), Office of this Paper.

JUNIOR (21) seeks position near Pharmacy school with time for to attend classes; disengaged early in November. 200/34, Office of this Paper.

LONDON or Suburbs; unqualified; outdoors; 28; permanency; 12 years' experience; good references; Photography. 205/51, Office of this Paper.

NOTTINGHAM or Near.—As Senior; good Prescriber; long experience; Nottingham references. Address, "Capsicum" (202/36), Office of this Paper.

QUALIFIED; 32; tall; abstainer; experienced, including Continental; middle October; view succession preferred. "Lithia" (205/32), Office of this Paper.

AN elderly qualified Chemist is open to an engagement; moderate remuneration for moderate hours; or as Dispenser to a Surgeon. 201/29, Office of this Paper.

PART-TIME (London), Tuesday, Wednesday, Friday, and Sunday; 27; good references; unqualified; experienced; Photography. 201/35, Office of this Paper.

JUNIOR or Improver in good house; 3 years' apprenticeship, just finished, in London. Give full particulars, indoors or outdoors, to 204/23, Office of this Paper.

UNQUALIFIED Assistant; 24; tall; London experience; disengaged November 4; present situation 3 years; good references; energetic. 204/22, Office of this Paper.

QUALIFIED; 27; 4 years present berth in West-End Dispensing business; London or suburbs preferred; outdoors; disengaged November 1. 202/24, Office of this Paper.

JUNIOR; age 21; 3 years' experience; good Dispensing. Photography; can accept berth immediately; N. London preferred; outdoors. H. Wythe, 90 Sumatra Road, N.W.

MANAGER; qualified; 32; town or country; competent; good all-round experience; Dispenser, Prescriber; permanency preferred. Apply, 205/8, Office of this Paper.

QUALIFIED; 24; tall; Photography; good-class experience; highest references; disengaged; insight to Optics or Dentistry preferred. "Chemist," 119 Caversham Road, Reading.

IMMEDIATELY.—Assistant, Manager, or Locum; smart, up-to-date worker; well up at Counter and Prescribing; abstainer; unqualified. "A.," 39 St. Thomas Road, Finsbury Park, N.

UNQUALIFIED; age 44; married one; 20 years' London experience; permanency; outdoors; excellent references; immediate; personal interview. "Radix," 81 Lander Road, Clapham, S.W.

MANAGER or Senior; unqualified; 14 years' West-End and South Coast experience; up-to-date; 34; married, no family; tall; Extractor, Prescriber. "Ability" (201/26), Office of this Paper.

ASSISTANT; unqualified; 26; tall; disengaged November 1; 10 years' first-class experience; good references; Midlands or South preferred; outdoors. "Calox" (201/38), Office of this Paper.

QUALIFIED; 26; Branch Manager or Senior; first-rate West-End and provincial Counter and Dispensing experience; permanency; excellent references. "Veritas" (200/13), Office of this Paper.

MANAGER, Locum, Assistant; qualified; thoroughly experienced; satisfactory references; disengaged; reliable; personal interview desired. "Veronal," 238 Derinton Road, Tooting, S.W.

WEST-END Pharmacist recommends active middle-aged qualified Pharmacist and registered Dentist as Manager; town and country experience; disengaged. "Elgin" (203/2), Office of this Paper.

PHARMACIST, of 22 years' experience, desires Managership with view to succession; successful Prescriber, Photography, Extractor, Optics; country business preferred. Address, 202/40, Office of this Paper.

MANAGER, qualified, seeks berth; married; first-class references and experience; disengaged; London and Continental experience; tall; Minor; Salesman and Prescriber. "Chemist," 109 St. Leonards Road, Hove.

EXPERIENCED Assistant, French (24), with good all-round experience and knowledge of English business, desires a situation in England. André Rioult, Bute's Pharmacy, 51 High Street, Camden Town, N.W.

ASSISTANT (31), unqualified, abstainer, and conscientious worker, wants morning and afternoon work, or short hours; excellent references; salary no object; interview. Roberts, 34 Thornton Avenue, Chiswick, W.

QUALIFIED Foreign Chemist (24), well up in French, German, and English language, and in International Pharmacy (Paris and Leipzig), wishes a post in an English Pharmacy; highest references. Apply to Nic. Muller, Echternach (Luxembourg).

COMPETENT Assistant or Manager; good references; 43; tall; take charge at once if necessary; 20 years' London and suburban experience; active, up-to-date in high-class Dispensing; moderate salary; Relief, days or half-days, entertained. "B.," 6 Station Parade, Horn Lane, Acton, W.

ADVERTISER has 30 years' good experience C. & D. trade; knowledge of Wholesale, ordinary Bookkeeping, Extraction, and Photographic; exceptional references; has Managed for many years; desires engagement in trustworthy position; S.E. suburb preferred; unqualified. 40 McLeod Road, Abbey Wood.

UNQUALIFIED; aged 40; abstainer; disengaged; competent, reliable; town or country; window-dresser; active; good all-round experience; Photography; married; outdoors. "Chemist," 6 St. George's Road, Ramsgate.

M.P.S.; 35; married; good all-round experience; 14½ years present situation; last few years had sole control; wants Branch Managership, within 30 miles of Manchester preferred. Nicholson, Swinton, Manchester.

WHOLESALE.

WANTED, situation as Wet or Export Counter; age 32; 10 years' experience. 204/19, Office of this Paper.

PERFUMER and Toilet Specialist; best experience; young; married; home or abroad. "N. A." (201/40), Office of this Paper.

LABORATORY.—Pharmaceutical Chemist desires post; good all-round Manufacturing and Analytical experience. 203/4, Office of this Paper.

GENTLEMAN (28), smart, seeks appointment as Traveller calling on Chemists or Doctors; experienced; 8 years' reference. 202/10, Office of this Paper.

EXPERIENCED, up-to-date Traveller, with good personal connection, seeks to Represent first-class Drug or Sundries house; highest references. 197/30, Office of this Paper.

COMPETENT man (26) seeks situation in Laboratory; 10 years' experience in the Manufacturing of Pharmaceutical and Galenical Preparations. "B.," 20 Castle Street, Kingsland.

LABORATORY Chemist desires permanency, any position; 10 years' experience, Wets, Drys, Veterinary, Perfumes, etc.; highest references. "Statim," 9 Penell Street, Clayton, Manchester.

I CAN introduce to any firm a personal connection of 10 years, South, etc.; good salesman, honest, sober, industrious, and unimpeachable references; young. "South" (198/2), Office of this Paper.

YOUNG Chemist (German) wants situation as a beginner in an Organic Chemical Works, Enamelling Works for preference; salary no object at first. Please address "U. 8209," c/o Daube & Co., Berlin, S.W. 19.

WHOLESALE Druggists, Drysalters, Oil Merchants.—Experienced Traveller, representing a Manufacturer, is open to take up one other good line in the Midlands, West Riding, and North, West, South Wales; could extend on suitable terms. Address, 196/32, Office of this Paper.

A FIRM with high-class Specialities is required by gentleman calling upon Doctors and Chemists with Drugs, Sundries, etc.; part expenses and commission; highest references. "Chrysarobin" (201/15), Office of this Paper.

GENTLEMAN calling upon the Medical and Dental profession desires additional Agency; North-West Counties; share expenses with commission; 5 years with present house. "Arnica" (201/51), Office of this Paper.

GENTLEMAN, with exceptionally wide Counter speciality experience (London and provincial), capable of creating a new Department or waking up an old one, desires an appointment; confidential replies will be honourably treated. Address, "Provinces" (197/26), Office of this Paper.

GERMAN (26), speaks French and English fluently, experienced Chemist's Assistant, first-class references, wishes to enter Wholesale trade or Manufacturing of Chemicals or Pharmaceutical articles as Manager or Assistant Manager. Apply to Geo. Rein, 88 Seymour Road, Harringay, N.

EXAMINED Medical-Druggist (24), diploma of German branch school, energetic and well educated, with good experience in Office work and special knowledge in Medical articles, desires situation in Wholesale; speaking English fairly well; highest references. Apply to W. Shilling, 12 Titchborne Street, Hyde Park, W.

MISCELLANEOUS.

McADAM & TUCKNISS, Sharedealers, Bank Chambers, Blackheath, S.E. Telephone 81 Lee Green.

SHARES FOR SALE (free of commission, subject).—200 Baiss Bros. & Stevenson 5½ per cent. Preference, 13s. 6d.; 30 Brunner Mond, 102s. 6d.; 150 Field's Ordinary, 5s. 4½d.; 300 G. B. Kent 5½ per cent. Preference, 16s. 7½d.; 10 Ilford Ordinary, 14s.; 150 Lewis & Burrows' Ordinary, 4s. 3d.; 25 Preference, 11s. 10½d.; 200 A. J. White Preference, 10s. 10½d.; 200 Wright Layman Preference, 21s. 1½d. c.d.; 100 Parkes' Drug Ordinary, 3s.; 200 International Sponge 6 per cent. Preference, 14s. 1½d.

WANTED (subject).—Camwal Preference, 5s. 6d.; Debentures, £34 x.d.

List of shares for sale and wanted sent free on application. Bankers, London County and Westminster. Established 1898.

SHOPFITTINGS (equal to new).—13-ft. Drugfitting, with Mahogany and Glass-labelled Drawers, etc.; 12-ft. Mahogany and Plate-glass Serving-counter, with Counter Drawers at back; Mahogany and Plate-glass Perfumery Showcase and Desk; 6-ft. Mahogany and Bent Plate-glass Counter Showcase; 10-ft. handsome Mahogany Wall Showcase; 6-ft. Mahogany and Plate-glass Dispensing-screen and Counter, with Sponge-case; all in excellent condition; price £60; ready for immediate use. **PHILIP JOSEPHS & SONS, LTD.**, 93 Old Street, London, E.C.

AMAZINGLY CHEAP LINES IN SECOND-HAND FITTINGS.—1 set of 3 Plate-glass Shelves, 5 ft. 10 in. long by 15 in., 12 in., and 9 in. wide, for shop-window, complete with Bars and Brackets, 60s.; 1 3-ft. set of ditto, 30s.; 1 6-ft. bent-front Counter-case, 70s.; 1 Tooth-brush Case, with 2 Glass Shelves, 21s.; 1 Silent Salesman, 2 ft. by 3 ft. by 1 ft. 6 in., with Glass Shelves, etc., 75s.; 1 12-ft. Drug-fixture, containing Mahogany Gold-labelled Drawers, Shelving, etc., £9; 1 Range of inclusive Counter Drawers, 42s.; 120 Gold-labelled Bottles, assorted sizes, £4 15s. **R. TOMLINSON & SONS**, Headquarters for Chemists' Shopfittings, Bond Street, Constitution Hill, Birmingham.

CHEMISTS' SHOPFITTINGS.—Glass Show-cases, Window-enclosures, Glass Shelves, Drugfittings, Dispensing-screens, Wall-cases, Perfume-cases, Glass-front Counters, Drawers, etc.; All Shopfittings, second-hand, at lowest prices that can't be beaten; get my estimate; you can't do better; 30 years fitting Pharmacies. **George Cook**, The Working Shopfitter, 8a Cross Street, Islington, London.

McQUEEN'S System of Accounts for Chemists; works out gross and net profits, balance sheet, and income-tax return with guaranteed certainty; a work well known and considered indispensable by progressive Chemists (Ninth Edition). Full particulars and testimonials, post free, **McQueen & Co.**, Moat Road, E. Leicester.

A FIRST-CLASS German house, possessing own Physician, skilled staff for Manufacturing, Travellers, and Advertising Manager of long experience, is open to negotiate with English firms who can supply in bulk Pharmaceutical, Chemical, or Technical Specialities for Manufacturing, putting up, and successfully introducing in Germany; highest credentials. Apply first place, 185/24, Office of this Paper.

A FIRST-CLASS Private Agency is open, with one of the largest Christmas-card firms, who are ready to appoint male and female Agents everywhere; work congenial; remuneration the very highest; £2 to £3 per week easily earned in whole or spare time; special bonus schemes; British-made goods by London firm. Call or write, **Mitpubco**, 292 Bishopsgate, London.

THE Owner of British Patent No. 16777 of 1909 entitled "Improvements in, or relating to, Metallic Vessels," granted to A. Mauser, is desirous of Disposing of the Patent or entering into a working arrangement under licence with firms likely to be interested in the same. In the alternative the Owner would be open to consider proposals to manufacture the invention to fill any requirements of the market in Great Britain on terms to be arranged. The Patent covers an invention interesting to metal workers and manufacturers of metallic jars or receptacles. Detailed information as to the invention will be found in the Patent Specification, of which a copy will be supplied to any interested party on request. Full particulars can be obtained from, and offers made (for transmission to the owner), to Marks and Clerk, 57 and 58 Lincoln's Inn Fields, London, W.C.

DR. CHARLES WHITWICK YOUNG, Deceased.
PURSUANT TO STATUTE 22nd and 23rd VICTORIA, CAP. 35.

NOTICE IS HEREBY given that all persons having any claims against the Estate of Charles Whitwick Young, late of Newcomin Cottage, Dartmouth, in the County of Devon, but formerly of "Westleigh," Luton, in the County of Bedford, Physician and Surgeon, deceased (who died on the 7th August, 1911, and to whose Estate Letters of Administration were granted to Mrs. Emma Adelia Ann Oliver, of Polythic St. Germans, Cornwall, on the 20th September, 1911, out of the Principal Registry of the Probate Division of the High Court of Justice) are hereby required to send particulars of such claims to us, the undersigned, on or before the 20th November, 1911, after which date the said Administratrix will proceed to distribute the assets of the said deceased, having regard only to the claims of which she shall then have had notice.

Dated the 4th day of October, 1911.
WINTER, ROTHAMLEY & CO.
Solicitors for the said Administratrix.
16 Bedford Row, London, W.C.

SECOND-HAND CHEMISTS' FITTINGS.—We have an exceptionally fine selection of these in all sizes; prices are right and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, **RUDDUCK & CO.**, 262 Old Street, E.C.

A VOICE FROM THE COLONIES.

A South African Pharmacist writes: "Please send me all your letters, &c., up to date, and re-book me for a second year." This proves that the ideas, &c., I send are so valuable not only for English Pharmacists but those in the Colonies. Get ready for your Winter Campaign NOW. Booklet, "How to Increase your Business," explaining my methods, post free to Pharmacists only. Original ideas for new specialities, attractive window shows and good advertising are my speciality.

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One halfpenny per word with name and address. One penny per word if we register the address and attach a number.

No advertisement inserted for less than 6d.

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DRUGS AND CHEMICALS.

HYDRARGYRUM (clean), 2½ lb.; what offers? **BRADBURY**, 10 Lion Street, Walworth, S.E.

OPTICAL AND PHOTOGRAPHIC.

LANTERN-SLIDES for sale or exchange, 57 Manxland and its beauties and many others; good condition. **WRIGHT**, Chemist, Burnley.

CAMERA, American Rayo, 4 by 5, four double dark slides, solid leather case, and collapsible aluminium tripod; in leather case, 65s. "99," Office of this Paper.

SHOP FITTINGS.

PERFUMERY-CASE, mirror-back, desk at rear. **HEMMINGS**, 2 Scylla Road, Peckham.

PROPRIETARY ARTICLES.

OVERSTOCKED.—1 doz. each 6d. and 1s. Larola; 1 doz. 7½d. Keene's corn-cure; ½ doz. 2s. 9d. Sirolin; 1 doz. C sparklet bulbs; what offers? "CHEMIST," 261 Dewsbury Road, Leeds.

MISCELLANEOUS.

ABOUT 50 gross corrugated cartons for packing 1 doz. 2-oz. phials in each; what offers? 51 Cauldwell Street, Bedford.

OFFERS for 3 Riley's baths, 1 inside, 2 outside heaters; 1 Southall's electric boats and lighthouse window attraction; 1 20s. dental headrest, fit any chair. **HERBERT SMITH**, Workington.

WANTED.

PAIR of dispensing-scales, stamped and accurate. 197/28, Office of this Paper.

COUNTNER scale, correct. Full description, lowest price, Drug Store, Redbourn, Herts.

FOUR carboys, 30 in. to top of stopper. State lowest to **BRUNSDEN**, 46 Crown Street, Reading.

VEEDED vibrators, also other makes. Full particulars, **BRYAN & SPEDDING**, Deansgate, Manchester.

RUBY lamp, recess label bottles, shallow wall-case, tooth-brush case, check-till. **LIVESKY**, Preston.

CHEMIST'S personal weighing-machine, with height register. Price and particulars, **DALE**, 31 Warwick Gardens, W.

OPTICAL books; Minor, Major Chemists' books; send prepaid for valuation; cash offers per return. **GOWER**, Bookseller, Waterloo, Liverpool.

PLATINUM, any form or quantity; prompt remittance. **ROWSELL**, 11 Crebor Street, Dulwich, Platinum Refiner. Established 1886. Reference, London and South-Western Bank, E. Dulwich.

COMING EVENTS.

This section of the "C. & D." is reserved for advance notices of meetings or other events which are sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Friday, October 6th.

Dundee Chemists' Assistants' and Apprentices' Association, Mather's Hotel, at 9.15 P.M. Mr. W. J. Peacock on "A Suggested Policy for the Associations."

Tuesday, October 10.

Hull Association of Pharmacists, Grosvenor Hotel, Carr Lane, at 9 P.M. Monthly meeting.

Wednesday, October 11.

Manchester Pharmaceutical Association, Rooms of the Chemical Club, Victoria Hotel, at 7.30 P.M. Mr. James Grier, M.Sc., Ph.C., on "Modern Synthetic Remedies."
Newcastle-on-Tyne Pharmacists' Association, Hôtel Métropole, Clayton Street West, at 8 P.M. Annual meeting and election of officers.

Western Pharmacists' Association, York Room, Restaurant Frascati, Oxford Street, London, W., at 8 P.M. Whist-drive. Tickets (3s. 6d. each) from Mr. A. Latreille, 48 Baker Street, W., or Mr. R. E. Lownsbrough, 35 Clifton Road, Maida Vale, W., Hon. Secretaries.

Midland Pharmaceutical Association, The University, Birmingham, at 3 P.M. Annual meeting and election of council.

Thursday, October 12.

West Ham Association of Pharmacists, Earlham Hall, Forest Gate, London, E., at 7.45 P.M. Social evening (progressive whist and music). Tickets, including light refreshments, 2s. 6d. each, or two for 4s. 6d.

BOURNEMOUTH PHARMACEUTICAL ASSOCIATION.—The annual dinner will take place at the Gervis Hall Restaurant on October 18. Tickets (5s. each) from Mr. W. A. Bingham, Hon. Secretary, 58 Charninster Road.

PUBLIC PHARMACISTS' AND DISPENSERS' ASSOCIATION.—St. Bride Institute, Bride Lane, London, E.C., on October 18, at 8 P.M. Opening of the session; inaugural address by Mr. W. S. Glyn-Jones, M.P. The chair will be taken by Mr. John C. Umney, F.C.S. Pharmacists generally are invited.

NOTTINGHAM PHARMACEUTICAL ASSOCIATION.—The annual dinner is to be held at the Victoria Hotel on October 19, when it is expected that the President of the Pharmaceutical Society (Mr. C. B. Allen) will be present. Tickets (4s. 6d. each) may be obtained from the Hon. Secretaries, Mr. T. Freeman, 57 Mansfield Road, and Mr. E. E. H. Turton, 2 Chapel Bar.

MINOR EXPERIENCES.

AFTER a three-months' course at a well-known college, I presented myself at Galen Place, London, on the morning of September 27, for the practical portion of the examination. My first subject was *Dispensing*:

Make 5 oz. syr. ferri iod., take specific gravity, and label "Syr. ferri iodid, B.P."

Ferri persulph.	...	...	...	...	gr. v.
Cocain. hydrochl.	gr. 3.
Ol. theobromatis	q.s.

Fiat suppos. Mitte vj.

Potass. permang.	gr. ij.
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Ft. pil. sec. artem. Mitte xx.

j. sum nocte maneque.

Bismuth. subnit.	aa. 3iiij.
Sodii bicarb.	3j.
Liq. strych.	...	...	...	...	3j.
Spt. chlorof.	...	...	...	...	3vliij.
Inf. aurant. co. ad	...	...	...	...

Sig.: 3j. post cib. sing.

I finished well within time and noted the overdose of bismuth in the mixture, and was asked if I put cloves in the infusion.

Practical Chemistry in the afternoon. I was required to analyse the two substances in solution (oxalic acid and hydrobromic acid), also to find percentage of available chlorine in a sample of strong chlorinated-soda solution. Pure sodium thiosulphate provided.

The same evening to my relief I received a notice to attend for the oral examination on September 29 at 9.55 A.M. My first subject, after waiting about twenty minutes, was

Botany.—Here I was shown a slide (transverse section of leaf). Noticed oil-glands. What is their use? How secrete

the oil? Was it a normal leaf? I was then taken on assimilation, transpiration, and respiration. Under what conditions do they take place, and for what object? What are stomata for? I was given a flowering plant to describe and submit to class and subclass. Describe the leaf. What was odour due to? Did it contain oil-glands? I identified the plant as rue, and was then told to sit down.

Chemistry was my next subject. I was asked what I thought of some formulæ left by a previous candidate. What is benzene? How made? Also phenol and benzyl chloride. Action of acids on benzene, with formulæ. How make acetamide? How it differs from ammonium acetate? What is an alum? Action of sodium carbonate on it, also on potassium iodide? How make reduced iron and sodium arsenate? What is an anhydride? Action of sodium carbonate on bismuth nitrate?

Pharmacy.—I was shown pulv. pro pil. col. co. How recognise and make? Pulv. rhei co.: how make? Aq. laurocerasi: how make and strength? How make strong weak and weak strong? Hyd. c. creta, strength and of some other mercury preparations. How make ung. hydrarg.? Use of suet. What is lard? What is benzoated lard? How make? What are other ointment-bases of B.P.? I was next shown liq. picis carb.: how make? Tr. opii and strengths of opium preparations. Nux vomica and strengths. Shown distilling-apparatus and nitrometer: what used for? How estimate H₂O₂ in detail? Shown a syphon.

Prescriptions.—I had to write prescription into full Latin, also a calculation; then read about twelve to twenty scrips, and was asked various doses.

Materia Medica.—Shown cloves—botanical name and natural order? What contain? How obtained? What are they? S.G.? Is it easily saponifiable? Action of ammonia on it? Tonquin beans: what is odour due to? Aloes (various kinds) and a good specimen of digitalis-leaves. This concluded the examination.

A few minutes afterwards I was called up and received the congratulations of the Chairman. I found the examiners all very considerate and gentlemanly. I cannot agree with anyone who really knows his work saying he had a bad time with them. It was a rather exciting time waiting between subjects, and, for those who were collected enough to notice, a study in faces as the candidates came back from their various subjects—some hopeful and some despondent; and then the surprised and glad look of the successful and the gloomy and sad look of the unsuccessful.—A. C. S. (176/31.)

COLLEGE NOTES.

LONDON COLLEGE OF PHARMACY.—Students of the College numbering about sixty paid a visit to the works of Messrs. Parke, Davis & Co. at Hounslow last week. On arrival the company was divided in groups of ten, each being conducted over the buildings by a representative of the firm. The works were thoroughly inspected, and the working of the numerous types of pharmaceutical machinery explained; thus an opportunity was afforded of witnessing the various stages involved in the elaboration of fine pharmaceutical products from the crude drugs. The process of the manufacture of taka-diastase was subsequently witnessed and explained. A photograph of the visitors was taken, and the party was entertained to tea in the firm's club-house.

Rises in Prices.

THE "Dundee Advertiser" reports that a representative learned at a poor man's pharmacy that tablets and pills were much cheaper. "And why?" he asked.

The chemist smiled, as if satisfied. "Because of the competition," he said. "The various makers are trying hard to cut each other's throats. Twelve years ago you paid 10d. for twenty-five tablets; now you get the same number for 3²d."

"Good!" the "Advertiser" man ejaculated. "And has the rise in sugar affected you?"

The chemist shook his head. "Not to any appreciable extent. Glycerin is tremendously dear, but I believe this is owing to the amount needed for the manufacture of nitro-glycerin for blasting at the Panama Canal and Rosyth and other places. It's quite probable. Not long ago glycerin cost 56s. per cwt.; now I pay 124s."

"Remarkable! Anything else up?"

"Well, the warm summer and continual want of rain are said to have spoiled the grape crop. As a result lime-juice (sic) costs double what it did six months ago."

At that moment a shaggy mongrel dog sneaked into the shop and ran off with a dog-biscuit in its mouth.

The chemist smiled good-humouredly. "That reminds me," he said, "dog-biscuits are up 10s. per ton!"

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